The JOURNAL of AIR LAW and COMMERCE

Volume XXIV

1957

EDITED BY

Stanley Berge, Associate Editor
Professor of Transportation, Northwestern University

G. Nathan Calkins, Jr., Associate Editor
New York and D. C. Bars

Julian G. Gazdik, Associate Editor
International Air Transport Association; Quebec Bar

Robert R. Hume, Managing Editor
The Transportation Center at Northwestern University

DEPARTMENT EDITORS

Judicial and Regulatory Decisions
Howard Sweig, Student Editor, Northwestern University School of Law

Bibliography
Arthur G. Renstrom, Library of Congress

★

PUBLISHED BY
THE TRANSPORTATION CENTER
AT
NORTHWESTERN UNIVERSITY
FOR THE
SCHOOL OF LAW AND SCHOOL OF BUSINESS
Evanston, Illinois

Copyright 1957 by JOURNAL OF AIR LAW AND COMMERCE

NORTHWESTERN UNIVERSITY

JOURNAL OF

RR
(Eng Phy

UNIV. C
MAY 20
LAW LIBR.

AIR LAW and COMMERCE

Vol. 24 — WINTER, 1957 — No. 1

YOU'LL BE PROUD TO WEAR THE SILVER WINGS OF NAA

If you are interested in aviation... if you want to help keep America first in the air, you should join the NATIONAL AERONAUTIC ASSOCIATION

With your membership in NAA, you join—with other prominent aviation leaders—in affiliating with the oldest national aviation group in America . . . a non-profit, non-partisan organization formed in 1905 to inspire and foster development of aviation in the U.S.A.

NAA serves its many Chapters, other groups, and individuals at the local level. Nationally, it welds "grass roots" aviation's common interests together in many ways. It advances every phase of aviation by public education. It is custodian of the famous Collier and other trophies. And, it is official representative in the United States of the Federation Aeronautique Internationale.

Your support is needed to help NAA carry on its extensive program which promises to be of even greater public service in the important years ahead. What better time than NOW—in this 50th Anniversary Year of Powered Flight—to become an "NAA Citizen in Aviation, U.S.A."

HERE ARE SOME OF THE THINGS YOU RECEIVE —OR ENJOY— AS A MEMBER OF NAA:

- Distinctive NAA Silver lapel wing emblem and membership credentials.
- NAA wing decals for windshields.
- Monthly issues of National Aeronautics, NAA special bulletins, and various publications of Organization Affiliates and Industry Members.
- NAA Hertz Auto Rental courtesy card; Avis Rent-A-Car Credit Card
- CAA records search service.
- NAA staff assistance in your aviation problems, licenses, legal matters, regulations, etc.
- Local club visiting privileges extended by NAA Chapters.
- Special services in Washington, D.C. tailored to particular needs.
- NAA conventions and flight round-ups.

YOU CAN SAVE MORE THAN YOUR NAA MEMBERSHIP COSTS

- Travel and pilot accident insurance . . . protection as low as $1 per $1,000 coverage.
- Special reduced subscription rates on most aviation magazines.

HERE'S YOUR APPLICATION BLANK FOR MEMBERSHIP IN NATIONAL AERONAUTICAL ASSOCIATION

NATIONAL AERONAUTIC ASSOCIATION
1025 CONNECTICUT AVENUE
WASHINGTON, D.C.

I want to become a member of NAA. Enclosed is my ☐ check ☐ money order for $6 for my membership dues.

NAME _____

ADDRESS _____

CITY _____ STATE _____

☐ PILOT ☐ NON-PILOT

THE JOURNAL OF
AIR LAW AND COMMERCE

Vol. 24 WINTER, 1957 No. 1

DEVELOPMENT OF THE NATIONAL LEGISLATION ON AVIATION SINCE THE CHICAGO CONVENTION

By Eugene Pepin

Director, Institute of International Air Law
McGill University

AFTER the signing of an international convention, especially one where legal problems are involved, States which have participated in its preparation, and have signed it, may be called upon to enact, either before or after ratification, laws or regulations in order to bring the provisions of the convention into force in their respective countries. Adhering States will be in the same position. Moreover in some cases signatory States which have been unable or which are unwilling to ratify the convention or adhere to it, and also other States which have not even participated in its preparation, may consider it advisable to have a legislative text based on the provisions of the convention. And, for some years, we have observed a large legislative movement to effect the introduction of the principles and provisions of new conventions in the national laws of a number of countries.

Such has been the case with the various conventions concerning aviation, *e.g.*, the Paris Convention relating to the regulation of Aerial Navigation (October 13, 1919), the Havana Convention on Commercial Aviation (February 20, 1928), certain conventions on private air law, such as the Warsaw Convention for the unification of certain rules relating to carriage by air (October 12, 1929). However, the influence of these conventions on the legislative activity of the States cannot be compared, either in size or importance, to the great influence of the Chicago Convention on International Civil Aviation (December 7, 1944).

(a) *Basic Air Laws in Force Before the Chicago Conference.*

Prior to the Paris Convention, air legislation was practically nonexistent. It is possible to name in all Europe only a few, very short texts relating to limited subjects (right to fly, prohibited areas, licenses

of pilots).[1] In the United States, where aviation was not yet a matter of federal legislation, certain states, anxious to reduce the hazards of flight in the interest of their inhabitants, and disturbed by the possibility that their legal rights might be violated by the intrusion of unlicensed airmen, promulgated safety regulations.[2] In Asia, India has had, since 1911, an Aircraft Act (XVII of 1911). None of these texts had the character of basic law, nor covered all the legal problems connected with, or resulting from, air navigation.

In 1909, a group of European lawyers, members of the "Comité juridique international de l'Aviation" and aware of the necessity for the various states to adopt a uniform set of legal provisions on aviation, began to prepare a "Code de l'Air." Unfortunately, the Code was not completed before World War I. However, this effort was not without its influence on the further development of aviation legislation. During the war, in March of 1916, the countries of North and South America considered the same problem at the Pan American Aeronautical Conference of Santiago (Chile), and approved a recommendation in favor of a uniform code of laws on aeronautics. Matters to be covered were enumerated. However, nothing happened before the end of the war and the drafting of the Paris Convention.

The Paris Convention, the provisions of which were to be, for more than two decades, the guiding principles for most of the similar legislation of the world, was prepared during the Peace Conference of 1918-1920 by the representatives of 27 States of the five continents (the British Empire being counted as a single State). It was signed on October 13, 1919 on behalf of twenty-one States; three others thereafter acceded to it; three never signed, or acceded.[3] During the long life of that convention, thirty-eight States have been parties to it, either by ratification, or by adherence.[4]

All these thirty-eight States, either before or after becoming parties

---

[1] In the United Kingdom, Aerial Navigation Acts of June 2, 1911 and February 14, 1913; in France, a decree of November 21, 1911, amended by another decree of December 17, 1913; in Germany, laws of 1910 and 1911 for Brandeburg, Bavaria and Prussia; in Austria, Ordinance of December 20, 1912; in the Netherlands, law of 1912; in Serbia, laws of February 2, and March 16, 1913.

[2] In 1911, Connecticut, Pennsylvania and California enacted Aviation Acts. In 1913, Massachusetts had an Aviation Law (ch. 663), which regulated the flight of aircraft.

[3] Signatory States: Belgium, Bolivia, Brazil, British Empire, China, Cuba, Ecuador, France, Greece, Guatemala, Italy, Japan, Panama, Poland, Portugal, Rumania, Serbia, Czechoslovakia, Thailand, United States of America, Uruguay. Acceding States: Liberia, Nicaragua, Peru. Never signed, or acceded: Haiti, Hedjaz, Honduras.

[4] Argentina, Australia, Belgium, Bolivia, Bulgaria, Canada, Chile, Denmark, Esthonia, Finland, France, Great Britian, Greece, India, Iran, Iraq, Ireland, Italy, Japan, Lativia, Norway, Netherlands, New Zealand, Panama, Paraguay, Peru, Poland, Portugal, Saar, Spain, Sweden, Switzerland, Thailand, Czechoslovakia, Uruguay, Yugoslavia. Prior to World War II, three States denounced the Convention: Bolivia, Chile and Panama, and two others disappeared as independent territories: Austria and Saar.

to that convention,[5] promulgated laws and regulations;[6] and many non-contracting States also prepared legislation based on the same principles.[7] Such was the case of the "Air Code" enacted in 1932 by the USSR.[8] Prepared in about three years by the Society for Aviation and Chemistry, it represents the first attempt to deal in a single text with most aviation problems. Divided into nine chapters (153 articles), it refers especially to air navigation matters, and contains a chapter on labor conditions, and certain provisions on liability. A number of regulations enacted in subsequent years have served to complete it.

It should be noted that the titles of most of the laws enacted during the twenties and thirties included the words ". . . for the regulation of air navigation," in accordance with the convention's title; that part of their contents which referred to air navigation particularly was divided into chapters corresponding to the Convention and its Annexes. As the Annexes were mandatory upon the contracting States, some of these States did not prepare detailed regulations, and only made reference to Annexes which had to be published without modification. With respect to the laws, while they were based on the same principles, they were lacking in uniformity, and the efforts of the "Comité juridique international de l'aviation" between the two World Wars to prepare a uniform "Code international de l'aviation" produced no real result. The Paris Convention contained no provision encouraging uniformity, or requesting the International Commission for Air Navigation

---

[5] The Convention came into force on July 11, 1922.

[6] List, in chronological order, of the laws and regulations enacted by States which were party to the Convention; in ( ) is the date where they became party thereto:

Belgium	November	16, 1919	(1922)	Norway	December	7, 1923	(1931)
Canada		1919	(1922)	France	May	31, 1924	(1922)
Spain	November	25, 1919	(1934)	Czechoslovakia	July	8, 1925	(1923)
Austria	December	10, 1919	(1937)	Bulgaria	July	23, 1925	(1923)
Switzerland	January	27, 1920	(1934)	Argentina	September	4, 1925	(1936)
Australia	December	2, 1920	(1922)	Chile	October	17, 1925	(1926)
United Kingdom,				Latvia	June	17, 1926	(1937)
	December	23, 1920	(1922)	Yugoslavia	June	25, 1926	(1922)
India		1920	(1922)	Netherlands	July	30, 1926	(1928)
Ireland		1920	(1922)	Portugal	April	25, 1927	(1922)
New Zealand	Feb.	21, 1921	(1922)	Poland	March	14, 1928	(1924)
Japan	April	8, 1921	(1922)	Panama	May	4, 1929	(1929)
Sweden	May	26, 1922	(1927)	Uruguay	May,	1930	(1924)
Esthonia	March	8, 1923	(1938)	Bolivia	October	24, 1930	(1922)
Thailand	April	11, 1923	(1922)	Rumania	April	17, 1931	(1924)
Denmark	May	1, 1923	(1927)	Greece	June	3, 1931	(1922)
U. of S. Africa	May	21, 1923	(1922)	Peru	December	18, 1933	(1937)
Finland	May	25, 1923	(1931)	Iran	July	6, 1938	(1922)
Italy	August	20, 1923	(1923)	Iraq	August	6, 1939	(1922)

The texts of the above-mentioned laws, which are very difficult to find in national collections of laws, exist in French translation in the *Revue de la locomotion aérienne* (1910-1928), *Droit aérien* (1929-1931), *Revue générale de droit aérien* (1932-1939).

[7] Chronological list of laws of non-contracting States, with the exception of laws of American States mentioned in Notes Nos. 9, 10 and 12:

USSR	January	17	1921	Turkey	September	9	1925
Lithuania	December	10	1921	Iceland	June		1929
Germany	August	1	1922	USSR Air Code of			1932
Hungary	December	30	1922	Egypt	May		1935

[8] The text of the Code has been published in English in Air Law Review, Vol. 4 (1933), p. 164 and in French in the *Revue générale de droit aérien*, 1932, p. 417.

(ICAN) to collect national laws. Nevertheless, the Secretariat took the initiative of asking the States for their basic laws and regulations, and these were regularly received and published in the ICAN Information Bulletin. This activity was a stimulus for the preparation of national laws, especially in South America.

Colombia and Venezuela were the first American Republics to regulate aviation—as early as 1920.[9] Three years later, the Fifth Pan American Conference (Santiago, 1923) noted that some American States had already signed the Paris Convention and recognized that its provisions "might serve for the preparation of an adequate legislation." Nevertheless, as the Paris Convention met with certain objections from some States, among which were Brazil and the United States, the Conference decided to establish an Interamerican Commercial Aviation Commission, entrusted with the preparation of draft laws and regulations to be recommended to States, and also of a draft Pan American Convention on aviation. That commission did not meet until 1927, but Argentina, Brazil, Chile, and Salvador had, in the meantime, issued laws and regulations pursuant to the principles of the Paris Convention.[10] In the United States, where, through the efforts of the Conference of Commissioners of Uniform State Laws, a Uniform Aeronautics Act had already been adopted in 1925 by ten States, the first federal Act on Aviation, popularly known as the "Air Commerce Act of 1926," was enacted with the following title: "An Act to encourage and regulate the use of aircraft in commerce and for other purposes."

The Commercial Aviation Commission, when it met in Washington in May 1927, did not prepare any set of laws or regulations, but only a draft convention, which, after consideration and approval by the Sixth Pan American Conference held at Havana, was signed on February 20, 1928.[11] During the discussions, it appeared that a certain degree of uniformity among the various aviation laws of the Americas was desired, at least with respect to certain matters, such as the rules for licensing of aircraft and pilots, rules for air traffic, types of documents for entry and clearance. Article 32 was inserted in the Convention to such effect; it reads as follows:

> The Contracting States shall procure as far as possible uniformity of laws and regulations governing aerial navigation. The Pan American Union shall cooperate with the Governments of the Contracting States to attain the desired uniformity of laws and regulations for aerial navigation in the States party to this Convention.
>
> Each Contracting State shall exchange with every other Contracting State within three months after the date of ratification of this Convention copies of its air traffic rules and requirements

[9] Colombia, December 31, 1919, and March 15, 1920; Venezuela, June 16, 1920.

[10] Argentina, September 4, 1925; Brazil, July 27, 1925; Chile, October 17, 1925; Salvador, May 17, 1923.

[11] Only passing mention need be made in this Article of the Ibero-American Convention signed in Madrid on November 1, 1926, which was practically without influence on the development of national legislation.

> as to competency for aircraft commanders, pilots, engineers, and other members of the operating crews, and the requirements for airworthiness of aircraft intended to engage in international commerce.
>
> Each Contracting State shall deposit with every other State party to this Convention and with the Pan American Union three months prior to the date proposed for their enforcement any additions to or amendments of the regulations referred to in the last preceding paragraph.

Immediately after the signature of the Havana Convention most of the American States which did not have any basic law on aviation hastily prepared draft texts; those in which an aviation law was already in force issued, as far as necessary, improving amendments.[12] At the opening of the Seventh Pan American Conference in 1933 at Montevideo, there were only two Republics (Costa Rica and Haiti) which did not then have any such law. However, with respect to uniformity, the situation was not so encouraging. In a very interesting comparative study of the laws and regulations governing aerial navigation, submitted to the Montevideo Conference,[13] it was noted that "no organized effort appears so far to have been made to carry out the intention of Article 32, and each nation has, to a large extent, followed its own individual ideas in passing laws and regulations covering aerial navigation. It is recognized that a system of uniform national law adopted internationally is a novel suggestion; the airplane, with its speed of operation, has created a situation that cannot be treated with existing ideas."

After the Montevideo Conference, the American movement in favor of uniformity of air legislation did not stop. In 1933, Mr. Consentini, Director of the American Institute of Comparative Law and Legislation in Mexico City, published a Code of International Air Law which was widely distributed throughout the American Republics. This development received a new impetus in September 1937, when the International American Conference met in Lima and agreed to establish a Permanent Commission of American Aviation (CAPA)[14] which was charged with the "gradual and progressive elaboration of the Aeronautical Code of the American States." The Commission was also empowered to make recommendations to States for the modification or amendment of their national laws or regulations which would not be in accord with approved standards. Although the CAPA never met, several American Republics reviewed their legislation during the subsequent years, and some enacted new laws before the Chicago Con-

---

[12] New laws: Cuba, April 21, 1928; Peru, April 1, 1929; Panama, May 4, 1929; Ecuador, August 1929; Nicaragua, August 31, 1929; Guatemala, September 5, 1929; Honduras, April 12, 1930; Uruguay, May and June, 1930; Mexico, June 30, 1930; Bolivia, October 24, 1930; Dominican Republic, February 12, 1932; Paraguay, March 17, 1932. Amending laws: Venezuela, July 16, 1930; Brazil, April 22, 1931; Chile, May 15, 1931 (final text of October 17, 1925); Panama, August 23, 1932; Peru, December 18, 1933.

[13] Study made by Mr. Leland Hyzer, of Miami (Doc. of the Pan American Union).

[14] Cf. Revue aéronautique internationale, 1937, pp. 340-368.

ference: Colombia and Brazil in 1938, Bolivia in 1939, Mexico in 1940, Uruguay in 1942, Nicaragua and Venezuela in 1944.[15] These laws are still in force, except in Mexico and Venezuela whose laws were entirely revised in 1949 and 1955 respectively.

It should be noted that in Mexico those provisions which relate to aviation have been embodied since 1932 in a general law concerning all forms of communication: communications on land (railways and roads), communications on water (rivers and sea), aeronautical communications (67 articles), electric communications (telegraph, telephone, telecommunications, broadcasting), and mail services. The text of 1940 contains chapters on each of these various means of communication, and, in addition, two chapters of general applicability (one on penalties). Special mention should be made of the Brazilian and Uruguayan laws (called "Codes"); the former is to be considered as the first real Air Code promulgated in the world; the latter follows approximately the same pattern. They are divided into three parts: Public Air Law, Private Air Law, Violations and Penalties, and contain approximately the same number of articles (173 in the first, 184 in the second). Their provisions, placed in a logical order, cover not only air navigation matters, but also air transport subjects, including problems of liability for damage suffered by passengers and shippers, as well as by third parties on the surface.

As for the other continents, during the late thirties and prior to the Chicago Conference, very few new laws on aviation were promulgated. However, one should mention the publication in 1942 in Italy of a "Codice della Navigazione," which contains provisions relating to navigation on sea, rivers, and in the airspace. It was prepared by experts on maritime law, which was considered as the law applicable to any kind of navigation, and therefore to aviation, in the absence of any special provision. It is composed of a preliminary part of 14 articles applicable to all systems of navigation, of a complete maritime code (670 articles), of a code on air navigation (392 articles), and of a common part on penalties (234 articles). This Italian system was highly criticized, even in Italy. In other countries, only laws giving effect to the Warsaw Convention of 1929, and some regulations concerning the entry of foreign aircraft are to be found. There was in Europe—except perhaps in the Scandinavian countries—no trend comparable to the action of the Pan American Union towards uniformity; each State kept its legislation in harmony with technical progress through amended laws and additional regulations.

---

[15] Colombia, Ley sobre Aeronáutica Civil (May 26, 1938), which supersedes laws of December 31, 1919 and March 15, 1920; Brazil, Código do Az (June 8, 1938), which supersedes the decree of July 22, 1925; Bolivia, Reglamento sobre Tráfico Aéreo (January 19, 1939), which supersedes a decree of October 24, 1930; Mexico, Ley de Vías Generales de Communicaciones (February 19, 1940), which supersedes a law of August 29, 1932; Uruguay, Código de Legislación Aeronáutica (December 3, 1942); Nicaragua, Ley de Aviación Civil (June 13, 1944); Venezuela, Ley de Aviación Civil (June 13, 1944). During the same period, United States of America enacted the Civil Aeronautics Act of 1938, which repealed a number of provisions of the Air Commerce Act of 1926.

The States which had responsibilities in different continents (colonies, protectorates, mandates) extended—sometimes in a simplified form—their metropolitan legislation with a special delegation of power in order to meet local conditions.[16]

At the time when invitations were being sent out by the United States for the Chicago Conference, very few territories in the world were without legislation on aviation. In Europe there was only Luxemburg; in the Americas, Haiti; in Africa, Ethiopia and Liberia; in Asia, Afghanistan, Hedjaz, and China.

(b) *Basic Air Laws Enacted Since the Chicago Conference.*

The Convention on International Civil Aviation signed in Chicago on December 7, 1944 came into force on May 4, 1947. On that date, the International Civil Aviation Organization (ICAO) succeeded a Provisional Organization (PICAO) established by an Interim Agreement, signed also in Chicago and coming into force on June 6, 1945.

Neither the Convention nor the Interim Agreement contained any provision similar to Article 32 of the Havana Convention,[17] having the effect of securing a certain degree of uniformity in the laws and regulations of all Contracting States, and of promoting the exchange of texts between these States. It is true that under Article 37 of Part I (Air Navigation) of the Chicago Convention, the Contracting States undertake

> "to collaborate in securing the highest degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways, and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation."

But Article 38 permits deviations from adopted standards, and in addition, relates only to air navigation matters—only a part of the broad scope of the Chicago Convention.

Moreover, many articles of the Convention refer to national laws and regulations, and each Contracting State has the obligation of adopting measures ensuring that its aircraft will comply with the national laws and regulations of the other Contracting States when an aircraft of its nationality flies over or lands in these States.

In preparing for the coming into force of the Chicago Convention, the Interim Council of PICAO realized that it would be necessary to take inventory of the laws and regulations on aviation existing in at least those States which attended the Chicago Conference. The ICAN Information Bulletin previously referred to was suspended during the War, as well as the publication of the air law periodicals. As a result,

---

[16] e.g. Decree of February 13, 1933 for the Dutch Indies; Dahir of October 1, 1928 (Morocco); Decree of February 8, 1935 for Tunisia; Decree of March 9 for Togo and Cameroon; Colonial Air Navigation (Application of Acts) Order 1937 for most of the British Colonies; Protectorates and Mandated Territories; Decree of Mai 11, 1928 for French Colonies.

[17] See page 7.

upon the recommendation of an *ad hoc* Legal Sub-Committee, the ICAO Council agreed, on November 23, 1945, "that it was desirable to make a collection of national aviation laws" and instructed the Secretary General "to obtain the aviation laws of all countries of the world and any papers or studies that may have been published with respect thereto, which the Secretary General considers necessary or desirable."

A very short preliminary list of national aviation laws,[18] prepared by the Secretariat from the scarce sources available in Montreal, was sent in October 1956 to the fifty-four States which had participated in the Chicago Conference, with a request for correction either by addition of new matter, or by deletion of laws which had superseded; twenty States did not even acknowledge the letter. Fortunately, the Archives of the International Commission of Air Navigation in Paris, and the collection of texts published in Italian before World War II by the Government of Italy made it possible to prepare a more complete list, which was distributed with the documentation of the first ICAO Assembly (May 1947).[19]

Most of the laws listed in that document, or at least some of their provisions, were entirely obsolete, *e.g.*, the specific references to the Paris Convention and its Annexes. To replace the system of the Paris Annexes and their amendments, which automatically came into force, it became necessary for the States to designate an authority having the power to issue regulations; and the entire system of administration and control of civil aviation, which in the past had very often come under military jurisdiction, was to be revised in order to take into account the prospective development of aeronautics.

The ratification of the Chicago Convention and the drafting of legislative measures necessary to put it into effect obliged the States to reconsider the contents of their basic laws; they rapidly became convinced that these laws should be revised. In some countries, the successive additions or amendments to their original laws and the abrogation of parts thereof had rendered their air legislation so complicated and so intricate that it became obvious that a kind of systematic codification would be necessary.

From 1947 to the beginning of 1957, *i.e.*, in the last ten years, twenty-five entirely new basic laws have been enacted (twelve during the years 1948 and 1949), and seven old laws have been amended. There follows a list of the new laws, year by year.

1947: *Spain*, Ley de Bases de la Navegación Aérea (December 27)

1948: *Luxemburg*, Loi relative à la réglementation de la navigation aérienne (January 31)
New Zealand, Air Aviation Act (August 26)
Guatemala, Ley de Aviación Civil (October 28)
Switzerland, Loi fédérale (December 21)

---

[18] PICAO—Doc. 2146, AT/141, October 15, 1946.
[19] ICAO—A1-Le/11, May 1, 1947.

1948: *Lebanon,* Civil Aviation Law (January 11)
Dominican Republic, Ley sobre Navegación Aérea (January 19)
Yugoslavia, Decree relating to air navigation (June 1)
Iran, Law of civil aviation (July 19)
Costa-Rica, Ley General de Aviación Civil (October 18)
United Kingdom, Civil Aviation Act (November 24)
Syria, Law regulating air transportation and navigation (November 28)
Mexico, Ley de Aviación Civil (December 27)

1950: *Ceylon,* Air Navigation Act (March 29)
Honduras, Ley de Aviación (May 14)

1952: *Philippines,* Civil Aeronautics Act (June 20)
Japan, Civil Aeronautics Law (July 15)

1953: *China* (Taiwan), Civil Aeronautics Law (May 30)

1954: *Belgium,* Arrêté royal réglementant la navigation aérienne et fixant l'entrée en vigueur de la loi du 27 juin 1937 (March 26)[20]
Argentina, Ley No. 14307, Código Aeronáutico (July 15)
Thailand, Air Navigation Act (September 1)
Cuba, Ley Decreto (December 27)

1955: *Venezuela,* Ley de Aviación Civil (April 1)
El Salvador, Ley de Aeronáutica Civil (December 22)

1956: *Afghanistan,* Civil Aviation Act (March)

The pre-Chicago laws which have been amended in order to meet the obligations deriving from the Convention are those of the following States:

Australia, Air Navigation Act 1920-1950.
Canada, Aeronautics Act 1952 (Ch. 2 and 302).
Iceland, Air Traffic Law 1929 (revised by law of May 17, 1947).
Ireland, Air Navigation and Transport Acts, 1936 to 1950.
Pakistan, Aircraft Act 1934, as amended up to 1950.
Union of South Africa, Aviation Act 1923, as amended in 1946.
United States of America, Air Commerce Act of 1926 (Section 6), as amended August 1953.

In France, no modification of substance has been made in the basic law of 1924, but, in accordance with a general program of codification of legal texts, the codification of laws relating to aviation was undertaken in 1953. Provisions of the law of 1924, as well as of twenty other laws or ordinances, have been incorporated in a "Code de l'aviation civile et commerciale" promulgated by decree dated November 30, 1955.[21]

Consequently, at the beginning of 1957, the only States of the world that still had pre-Chicago laws unaffected by the Convention were: Austria, Bolivia, Brazil, Bulgaria, Burma, Cambodia,[22] Chile, Colom-

[20] That law, prepared in the thirties to take the place of the basic law of November 16, 1919, was promulgated on June 27, 1937, but did not come into force until March 26, 1954.

[21] See in this issue an article on the French Codification, page 24.

[22] Cambodia, Laos, Morocco, Tunisia, Vietnam have still laws dating from the time when they were part of the French Union.

bia, Denmark, Egypt, Ecuador, Finland, Germany, Greece, India,[23] Indonesia, Iraq, Israel, Italy, Jordan, Laos,[22] Lybia, Morocco,[22] Netherlands, Nicaragua, Norway, Panama, Peru, Poland, Portugal, Rumania, Sudan, Sweden, Czechoslovakia, Tunisia,[22] Turkey, USSR, Uruguay, Vietnam.[22]

The following States have no basic aviation law at all: China, (Peiping), Ethiopia, Haiti, Liberia, Paraguay, Saudi Arabia, South Korea.

However, most States in these two groups are preparing either new or revised laws.

The enactment in the course of ten years of new or revised basic laws by thirty-two States—among the seventy that are parties to the Chicago Convention is certainly a great achievement. However, is it possible to detect in this activity some trend towards uniformity? Unfortunately, the laws of these thirty-two countries are far from being uniform with respect either to their length, their format and divisions, or their content.

The length of these laws varies from five articles (Australia) to 329 articles (El Salvador). The Acts prepared in accordance with the British technique are relatively short. The European laws, and those prepared in other countries in accordance with the same method, rarely have more than one hundred articles (the new French Code, with its 198 articles, is an exception). The Latin-American laws generally contain more than one hundred articles (the Cuban law, with its twenty-four articles, is also an exception).

The lengthy laws are often divided into Parts, Chapters, or Sections, but they do not necessarily present the various subject matters in the same order, and the provisions of the shorter laws are not always placed in a logical order.

The Australian Act, the shortest one, is essentially a text designating an authority with power to issue regulations. The other laws also contain delegations of authority, and, in addition, more or less different provisions covering various subjects.

Some of the additional provisions cover the organization, or administration of civil aviation, and also establish, besides a Ministry, or a Department of Aviation, another authority such as the Civil Aviation Council in Afghanistan, the Air Transport Board in Canada, the Comision de Aeronáutica Civil in Cuba, the Civil Aviation Board in Iran, the Civil Aeronautics Board in the Philippines, the Commision de la Navigation Aérienne in Switzerland, the Civil Aviation Board in Thailand, the Civil Aviation Advisory Committee in the Union of

[23] India is still using the Air Manual, which contains laws and regulations on aviation. In the last revised edition, corrected up to 1952, which is available in Montreal, Sect. 4 refers to "power of central government to make rules to implement the Paris Convention of 1919" (no mention of the Chicago Convention). The similar Air Manual used by Pakistan contains the same Aircraft Act 1934, but the corresponding provision has been amended in the edition of October 26, 1950, to read "to make rules to implement the Chicago Convention."

South Africa, and the Air Transport Advisory Council in the United Kingdom.

The scope of very few laws is limited to air navigation matters. The only laws thus limited are those of Afghanistan, the Dominican Republic, Iran and Thailand. The other laws also cover air transport matters, with provisions—more or less detailed—relating to liability for damages to third parties on the surface, and sometimes to passengers and cargo.

Certain laws deal with specific problems, such as: nuisance and trespass (New Zealand, Union of South Africa, United Kingdom); births and deaths on board (Argentina, Belgium, Iran, Mexico, Venezuela); carriage of narcotics (Venezuela).

A specific reference to the Chicago Convention exists only in the laws of Afghanistan, Australia, Ceylon, Costa Rica, Japan, New Zealand, Pakistan, Thailand, and the United Kingdom. A provision on sovereignty over air space—a common provision in pre-war laws—appears only in the laws of Afghanistan, Argentina, Costa Rica, Guatemala, Honduras, Iran, Lebanon, Mexico, Syria, United States of America, and Venezuela.

Finally, all the laws—except some in the British group—pay particular attention to violations and penalties; for instance, in the laws of Belgium and Luxemburg, three quarters of the articles are devoted to that question.

Such a rapid survey of these new laws will be enough to show how they differ from one another, and how great are the difficulties encountered by lawyers and scholars engaged in a comparative study of aviation legal problems. Nevertheless, it would be unfair to leave unmentioned some family resemblances which exist between some of these laws.

The laws of Belgium and Luxemburg are almost identical; these two member-countries of Benelux are accustomed to harmonizing their legislation.

The laws of two neighboring countries of the Middle East, Lebanon and Syria, are also very closely related.

The Philippines Act is partly a copy of the USA Civil Aeronautics Act of 1938.

The laws of the British group also have some similarity to each other.

While it is not the purpose of this article to consider in detail each of the above-mentioned laws, nor to determine what should be the contents of an ideal aviation law, it would nevertheless be of interest to devote some attention to three particular laws, prepared in three States of different legal cultures, the Ceylon Act, the Swiss law and the Salvadorean law, each one written in an official language of ICAO, English, French, and Spanish, respectively.

The Ceylon Act (1950) was drafted in the customary British style, but its contents are more comprehensive than in the other Common-

wealth Acts. It embodies the Air Navigation Act (1920-1947) with the necessary modifications, the Carriage by Air Act (1932), and some other matters. It contains forty-one Sections divided into six parts, namely:

I. Air Navigation (power to give effect to the Chicago Convention and Annexes and to regulate Air Navigation; nuisance on areodromes; trespass, nuisance and responsibility for damage; establishment of aerodromes, obstructions near aerodromes; dangerous flying; investigation into accidents; wreck and salvage; infringement of patents, exemption from seizure on patent claims; powers in case of emergency).
II. Additional provisions applicable to Civil Aviation (requirements for air transport undertakings; use of customs aerodromes; licensing of air transport in commercial flying).
III. Carriage by Air (Warsaw Convention to have force of law; actions against Governments which undertake carriage by air; extension to carriage by air which is not international).
IV. Administration (Director of Civil Aviation; delegation of powers by Minister; various administrative provisions).
V. Regulations and Orders (power to make regulations; detention of aircraft; publication of regulations and submission thereof to Parliament).
VI. Miscellaneous (jurisdiction, offences, penalties, definitions, repeals).

The "Loi fédérale sur la navigation aérienne" (December 21, 1948) was very thoroughly studied by the Swiss lawyers and the Federal Assembly. It is a very fine example as a legal text on aviation. It contains one hundred eleven articles divided into four parts:

I. Principles and basis of air navigation:
   1. Airspace and earth surface (sovereignty over airspace and consequences, use of airspace, ground installations).
   2. Aircraft and airmen.
II. Legal relations resulting from air navigation:
   1. Civil liability towards third parties.
   2. The law of air transport.
   3. General provisions on civil liability.
   4. Attachment of aircraft prior to judgment.
   5. Violation and penalties.
III. Development of air navigation (subsidies, participation, etc.).
IV. Scope of the law (radiocommunications, customs, military aircraft, etc.).

The Salvadorean "Ley de Aeronáutica Civil" of 1955 is the most complete existing law on aviation.[24] It gives effect not only to the Chicago Convention, but also to the Warsaw, Rome and Geneva Conventions. In its preparation, the Air Code of Brazil, the Law on Communications of 1949 of Mexico, the Law of 1947 of Spain, the Code of Navigation of Italy, the Civil Aeronautics Act of 1938 of the United States, and the Draft Code of Chile of 1944 were taken into consideration. It contains 329 Articles divided into three parts, which do not have titles.

[24] Chapters deal, for the first time, with agricultural aviation, and also with aerial work, educational and scientific aviation.

Part I deals with: sovereignty; administration, Department of Aviation; aircraft (classification, nationality, legislation, airworthiness), aeronautical register; personnel licenses; air traffic; commercial operations; ancillary services; aerodromes; services of public air transport (certificates, special permits) private services; agricultural aviation; clubs, schools and manufacturers; investigation of accidents.

Part II deals with: contract of carriage by air; legal status of aircraft commander; sale and lease of aircraft; mortgages; civil liability (damages to passengers, luggage and cargo, damages to third parties; general provisions).

Part III concerns violation and penalities.

(c) *Assistance in the Preparation of New Basic Air Laws.*

Whatever the merits of these different laws as regards uniformity, overhauling of obsolete legislation has never been an easy task. States must overcome a number of difficulties, either in the preparation of the draft, or in trying to reduce the customary delays involved in discussions within governmental agencies and in Parliaments. Fortunately, the increasing interest in aviation all over the world has a stimulating effect on lawyers, officials and parliamentarians, and there is also the permanent influence exercised upon governments by the International Civil Aviation Organization, either on the occasion of intergovernmental meetings, or through special visits made to the various countries by the ICAO regional representatives.

The main difficulty encountered by most governments in the preparation of an aviation law is the lack of competent personnel. With the exception of some leading States in aviation, the specialized Department of Aviation is generally composed of one single lawyer in charge of all legal affairs. It is therefore difficult for him to devote weeks or months of uninterrupted work to a special project. In recent years, that difficulty has been overcome by regional cooperation, and by assistance given to States by the International Civil Aviation Organization.

The similarity between certain laws already mentioned is the result of regional cooperation, but the initiatives of the Scandinavian States and the Central American States deserve particular attention.

Soon after the ratification of the Chicago Convention by Sweden, the revision of the Swedish basic law was undertaken in cooperation with Denmark, Norway, Finland, and Iceland. A preliminary draft was prepared for consideration by the national committees established in the different countries. The results of their internal discussions were examined at several conferences attended by legal experts, and also by specialists when necessary. Regulations for the application of the basic law were prepared at the same time. The draft law in its final form is now going through the constitutional channels of each particular country.[25]

In Central America, the Directors of the Civil Aeronautics Departments of the five Republics (Guatemala, Honduras, El Salvador, Costa

[25] See, in the same issue, the article of M. Torsten Nylen, page 36.

Rica, Nicaragua) and of Panama, who had been meeting from time to time since 1951 in order to discuss problems of common interest, decided, at their Third Conference held in Panama (April 14-17, 1953), to revise their legislation and to prepare a basic uniform air law draft. To such effect a Legal Commission was established, and, during the first session held in Tegucigalpa (September 21-29, 1953), a preliminary draft of a Law on Civil Aeronautics was discussed and circulated among the governments. The draft was revised at a second session of the Commission (Managua, February 1954). The final draft was considered by the Fourth Conference of Directors, who met in Managua from July 15 to 20, 1954, with the attendance, as observers, of representatives of Mexico and of ICAO; the Legal Adviser of an ICAO Mission in El Salvador acted as technical adviser of the Conference. After reconsideration by a Legal Commission of the Conference, the text of the draft "Codigo de Aviacion Civil" was approved and attached to the Final Act of the Conference.[26] A special resolution of the conference recommended its adoption by the States of the Central American isthmus "with the indispensable adjustments in order to fit the Constitution of each country, but maintaining as far as possible the format and the principles of the Code in order to obtain the maximum of uniformity in the Central American air legislations." The draft code has already been used for the Salvadorean Basic Law, and, in the near future, will be adopted by other Republics; it contains 269 articles divided into three parts which correspond more or less to the divisions of South American Codes like the Brazilian and Uruguayan Codes; however, the parts have no title, while in the latter Codes, they are called: Public Law, Private Law, and Penalties.

In bringing up to date their obsolete laws, States party to the Chicago Convention, and some others, have received assistance from the International Civil Aviation Organization. The Legal Bureau has constantly encouraged States to revise their laws and regulations in order to achieve conformity with the Convention and its Annexes; texts of newly enacted laws have been distributed[27] and advice has been given on request. However, the really effective guidance in this field has been given by the ICAO services of Technical Assistance and its missions on the spot. Fourteen States have had, or still have, the benefit of the advice of ICAO missions and, in some cases, of specialized lawyers attached for a limited time to the mission.[28] The basic laws of El Salvador, Thailand, and Afghanistan are already the result of the work accomplished by these missions.

---

[26] Acta Final de la Cuarta Conferencia de Directores de Aeronáutica Civil de Centro-América y Panamá (Managua, Julio de 1954). Imp. Editorial "Novedades," Managua.

[27] Unfortunately the new laws are not published and distributed by ICAO, as they were by ICAN.

[28] These lawyers, although they are highly qualified, do not necessarily possess an identical legal training, and they do not always work in accordance with similar practices in legislative drafting; the final result would perhaps not be as uniform as when assistance is given on a regional basis.

A further, not inconsiderable difficulty in the enactment of a new law without unreasonable delay resides in the necessity of obtaining the approval of other interested governmental agencies, and also in the customary length of the parliamentary phase, especially when the legislative bodies are not in continuous session, or hold only one session a year. An average of three years is the usual interval of time from the initial preparation of the draft up to the promulgation of the law, but may be and often is much longer. For example, in Argentina, apart from a comprehensive set of resolutions in force since 1925, there was no basic law up to recently: since 1923, at least half a dozen draft basic laws have been prepared, but never were discussed in the Parliament;[29] in 1950, a draft was prepared by the "Instituto de Derecho Aeronáutico de la Nacion," a body of eminent lawyers; it was submitted to the Chamber of Deputies in 1951 and approved by the "Congresso Argentino" as "Codigo Aeronáutico" on July 15, 1954. In Chile, a "Codigo Aeronáutico" has been under preparation since 1938; two successive drafts were sent to the Chamber of Representatives in 1941 and in September 1944; the first one was withdrawn by the Administration; the second one was approved by the Chamber in September 1947, and submitted to the Senate; but the recent coming into force of the Chicago Convention has necessitated a number of modifications. A new draft was presented to the "Congresso Nacional" in 1952 and is awaiting approval.[30]

The draft prepared with the help of the ICAO Technical Assistance Mission in El Salvador received better treatment. The Legal Adviser of the Mission, who is a lawyer of Latin-American training, prepared, in the late months of 1953, a draft law which was submitted to the Government in January 1954. A comprehensive introduction explained the reasons for such a law, and the sources of its 336 provisions. After the Conference of Managua in July 1954,[31] the draft was revised, discussed at length with the various authorities, and a draft "Ley de Aeronáutica Civil" (not a "Codigo") was submitted to the Congress on June 29, 1955. In less than six months it was adopted. Two special Committees of the Congress considered the draft very carefully, and their reports were ready on October 26. Public discussion in full session lasted about five weeks. The ICAO Legal Adviser acted as an adviser to the Congress.[32] On December 2, a text of 329 Articles was approved by the Congress and published in the "Diario Oficial" on December 23, 1955. It is interesting to note that, in the course of development of that law, regulations also prepared by the Mission were issued—in particular a Presidential Decree on crop-dusting, which came into force on September 2, 1954. The same text was enacted in

[29] Cf. Hector A. Perucchi, Proyectos de Leyes Aeronáuticas en la Republica Argentina. Buenos Aires, 1951.

[30] Cf. Eduardo Hamilton, Manual de Derecho Aéreo. Santiago, 1950.

[31] See note 26.

[32] It should be noted that Representatives of Airlines and of the Association of Pilots were authorized to present arguments before the Congress in full sessions.

Nicaragua on September 3, 1954. Regulation of this activity is of great importance to these agricultural countries.

(d) *Basic Air Laws Under Preparation.*

The great effort towards the renovation of obsolete legislation on aviation is still at work, but it may be said that the final objective is in view, at least in thirty-two States. A short description of the stage of preparation or approval of the laws will complete the picture of the air legislation development since the Chicago Conference.

A. Africa

Ethiopia—Ethiopia has neither law nor regulation on aviation. The efficient ICAO Technical Assistance Mission concentrated its efforts on the technical aspects of aviation. However, although the mission acted without benefit of lawyer, a short draft of basic law was prepared and submitted to the Government as early as 1950. After translation in Amharic, the draft is still before the Legislative Council. The same project has been used by the Technical Assistance Mission in Afghanistan, where a Civil Aviation Act was enacted in 1956 on a similar basis.

Liberia—There is no Aviation Department proper, or law on aviation; for a few months past, regulations have been in preparation in order to bring the ICAO Annexes into force.

Lybia—Theoretically under the Constitution, certain pre-war Italian air regulations appear still to be in force. In 1954, an excellent lawyer was sent to Lybia as Technical Assistance expert; a preliminary draft was attached to a report, and, after several months of discussion with the Lybian officials, a final draft was approved in 1956. However, the law is not yet in force, because of certain difficulties of translation into Arabic. Some regulations have also been prepared by the Technical Assistance Mission; it appears that they are informally observed although not effectively in force, in the absence of a law giving authority for their issuance.

Sudan—In the Sudan, which became an ICAO member on July 29, 1956, certain air regulations are in force which date from the period of the Anglo-Egyptian *condominium*. However, a Civil Aviation Act has been in preparation since 1953, and an ICAO Technical Assistance legal expert will probably be sent to Sudan in the near future.

Union of South Africa—An Aviation Act of 1923, as amended by an Act of June 14, 1946 is still in force. [33] The Act of 1923 refers to the Paris Convention of 1919, the text of which is attached thereto. The amending Act of 1946 refers to the Interim Agreement, and to the Air Transit Agreement, but not to the Chicago Convention. The authorities of the Civil Aviation Department are presently revising the laws and regulations, in order to adapt them to the Chicago Convention and its Annexes.

---

[33] See *South African Law Review*. Vol. 71 (1954), p. 190.

B. *The Americas*

Bolivia—A "Reglamento" of 1939 is still in force. The lawyer for the Aeronautical Administration has prepared, on the basis of the various laws and codes of South America, a "Codigo Boliviano de Aeronáutica Civil" (358 articles), which is under study by the government.

Brazil—According to recent information, studies are under way in order to review and, if necessary, to revise the "Codigo do Ar."

Chile—It is hoped that the long expected "Codigo" will be approved in the near future by the "Congresso."

Colombia—The Civil Aeronautical Law of May 26, 1938 is still in force. A draft of a new law has been under study since 1953, and, when completed, will be presented to the National Congress. A "Manual de Reglamentos," initiated in 1948 by an efficient Director of Colombian Aviation in order to cover all ICAO Annexes, has never been completed.

Costa Rica—The country has a relatively new law dating from October 18, 1949.[34] Nevertheless, pursuant to the recommendation of the Managua Conference, a new Aviation Law has been in preparation since 1956, with the assistance of the legal adviser of the ICAO Mission in El Salvador.

Ecuador—The law in force dates back to 1936, regulations concerning only technical matters were issued in 1954. A "Proyecto de Codigo Aeronáutico, 1956 (204 articles), was prepared by the legal experts of the Ecuadorian Aviation, with the assistance of an American Mission.

Haiti—A former member of the Institute of International Air Law of McGill University, Montreal,[35] is presently working on an Aviation Law and a set of regulations, based on the Chicago Convention and its Annexes.

Honduras—Honduras, like Costa Rica, has a recent law (March 14, 1950). However, pursuant to the recommendation of the Managua Conference, a draft new law is in preparation, with the assistance of the legal adviser of the ICAO Mission in El Salvador. The representative of Honduras at the last ICAO Assembly (Caracas, June 1956) announced that the law will be enacted in the near future.

Nicaragua—The present law is a pre-Chicago text (June 13, 1944) and concerns only air navigation matters; the draft code recommended by the Managua Conference is likely to be approved.

Panama—A law of 1929, completed by two decrees of August 23, 1932 and January 19, 1937 is in force in the country, which is not yet a member of ICAO. A new Civil Aviation Law is in preparation, with the assistance of the ICAO legal adviser of the Mission in El Salvador.

---

[34] Article 139 of that law prescribes a provisional application of the United States Regulations and Standards, pending the enactment of other Rules.

[35] Lectures are delivered at the Institute on national laws and their preparation.

Paraguay—In September 1953, a Commission was appointed by the Minister of Defense for the drafting of a basic aeronautical law. The subsequent reorganization of the Civil Aviation Administration has given new life to the project; the draft has just been completed and will be submitted to the Congress sometime in 1957.

Peru—The law in force is a decree of December 18, 1933. During the Summer of 1956, a special Commission was entrusted with the drafting of a "Ley General de Aviacion Civil y Comercial." The legal adviser of the ICAO Technical Assistance Mission in Central America was recently called in consultation, and it is probable that the new law will follow the basic law of the Central American States.

C. Asia

Burma—An Aircraft Manual similar to those existing in India and Pakistan is still in use in Burma. No revision has been made. The Union of Burma Aircraft Act of 1934 is based on the provisions of the Paris Convention of 1919. The regulations in force date back to 1937, even to 1920. A very able lawyer has been sent to Burma by the ICAO Technical Assistance Service in order to study the modifications necessary to bring the Manual up to date. Burma, which has already adopted the regulations of the World Health Organization, is anxious to have adequate provisions in the aviation field as well.

Indonesia—The Dutch legislation dating from 1936, and still in force, fortunately gives to the Chief of Civil Aviation the necessary authority to make and enforce regulations on air traffic. An ICAO Technical Assistance Mission is preparing, in cooperation with the government, an Indonesian Air Law and Regulations, which will probably be based on other Asiatic models, such as the Japanese Law.

Israel—The texts in force are the United Kingdom Air Navigation Act of 1920, and the Air Navigation (Colonies, Protectorates, and Mandated Territories) Order of 1934, as amended in 1937, which are based on the Paris Convention, and were incorporated in the legislation of Israel when it became an independent State. The ICAO Technical Assistance Mission prepared in 1953, without the help of a legal expert, a draft Civil Aviation Act, which was submitted to the authorities. The mission also prepared technical regulations based on the Chicago Convention and its Annexes, but a basic law seems necessary to give a legal basis to the regulations.

Jordan—A draft law and regulations were prepared in 1952 by a British expert. They were translated into Arabic, studied by the authorities, and will probably reach Parliament in the near future.

Lebanon—An excellent lawyer, provided by the ICAO Technical Assistance Service, is presently working on a new law and regulations.

Pakistan—The amendment to the Aircraft Act of 1934, inasmuch as it referred to the Chicago Convention, has not been considered sufficient. A new Civil Aviation Act has been under study since 1951.

It will be based on the United Kingdom Civil Aviation Act of 1949, *i.e.* it will refer to Air Navigation matters. The Carriage by Air Act of 1934 will remain in force.

D. Europe

Austria—There is practically no law on aviation, except a text of 1951 concerning competencies in aviation matters. A draft law, which has been in preparation for three years, will give legal effect to the implementation of ICAO Annexes.

Greece—The law of 1931 is still in force. Since 1949, a "Legal Commission for the Codification of the Greek Air Law" has been working on the new law. That Commission, which is composed of eminent Greek lawyers, will complete its work in the near future.

Italy—A Commission has been established for the revision of the "Codice della navigazione." It would be premature to say whether the Code will remain as it is, or the aviation matters will constitute a separate document.

Scandinavia—The new laws prepared by the legal experts of the five governments (Denmark, Finland, Iceland, Norway, Sweden) will be very comprehensive, and replace a number of laws and regulations that are completely obsolete. The first law to be issued will probably be the Swedish Act, which is expected to come into force by January 1, 1958.[36]

Turkey—The only source of Turkish air law is a "Regulation of Air Navigation" of September 9, 1925. Soon after the ratification of the Chicago Convention, the Ministry of Communications established a Commission entrusted with the preparation of a draft law on aviation. The draft so prepared was quite complete.[37] Some time later, an ICAO Technical Assistance Mission was sent to Turkey, with a legal expert. That Mission does not seem to have been successful in the preparation of a basic law. Recently, a new draft, conceived in general terms, has been under study and will be submitted to Parliament.

Conclusions

From the preceding general survey of the development of national basic laws, it is possible to foresee what form of legislation will predominate in the future. Will it be the simpler one, essentially consisting of a delegation of power for the issuance of regulations, or the more or less elaborate one, containing specific provisions relating to air navigation, air transport, and other matters?

These two concepts have been discussed by many governments during their preparation of new laws. The advantages and disadvantages of both were carefully weighed. For example, in Japan, after a long discussion, it was agreed that a law with detailed provisions was more

---

[36] See Article of Mr. Torsten Nylen in this issue, page 36.

[37] See Nasir Zeytinoglu. Etude de droit aérien turc. Lausanne, 1951; and Journal of Air Law and Commerce, Vol. 23 (1956), pp. 379-478.

adequate, because matters affecting the rights and obligations of the people should be fully covered by a law.

It seems that the simpler form will be progressively abandoned, in spite of the fact that this form permits keeping the necessary regulations up to date, without the necessity for submitting to a Parliament the frequent modifications which come about as a result of the progress of aviation.

At the same time, the form of "Code" is making more and more progress; that form which existed before Chicago only in the USSR, Brazil and Uruguay, is now used either under the name of "Code" as in Argentina, Chile, Bolivia, Ecuador, and Central America, or under the name of "General Law on Aeronautics." The French new Code, incomplete as it may be, is an illustration of the same tendency.

When all the laws now in preparation or revision have been completed—probably in a year or two—a further stage in legislative development on aviation matters will have been accomplished; and the number of States still having pre-Chicago laws or no laws at all will be largely reduced. For example, among the fifty-four States which took part in the Chicago Conference, only eight of them — including four which at present have a seat in the ICAO Council — will not yet have modified their laws.

With respect to uniformity, some progress is also expected, at least regionally; it is probable that the Latin-American countries, which have been so anxious, since 1916, to arrive at real uniformity, will devote attention to the latest achievement in this field. The International Civil Aviation Organization will certainly continue to provide States all over the world with the necessary help, either through its legal officers or the lawyers attached to Technical Assistance Missions.

It is therefore hoped that in the near future all the States parties to the Chicago Convention, and perhaps some others, will have a modern and up-to-date basic Aviation Law.

BIBLIOGRAPHICAL APPENDIX

Note: As a complete publication of all the basic laws on aviation presently in force does not exist, references are given hereinafter to the various publications where the texts of these laws may be found.

Afghanistan—Civil Aviation Act 1956. Mimeograph publication (6 pages) of the Government of Afghanistan, Kabul, 1956 (English and Persian texts).

Argentina—Código Aeronáutico (Ley Núm. 14.307, 1954). 31 pages. Imprenta del Congreso de la Nacion, 1665, Buenos Aires, 1954.

Australia—Air Navigation Act 1920-1950. 2 pages. Commonwealth Government Printer, Canberra.[1]

[1] There exists also an excellent publication for the use of the Aviation Department called "Air Navigation Act 1920-1950 and Air Navigation Regulations, with Index"; 164 pages. Commonwealth Government Printer, Canberra, 1956.

Belgium— Loi no. 434 du 27 juin 1937. Recueil des Lois et Arretés Royaux de Belgique, 1937, I, p. 1802.[2]

Bolivia—Reglamento sobre tráfico aéreo 1939. Mimeograph Publication of the "Ministerio de Defensa Nacional."

Brazil—Código do Ar (Law of June 8, 1938), published in the Diario Oficial, June 27, 1938. See also "Coleçao das lies da Republica dos Estados Unidos do Brasil," 1938, Vol. II, p. 220.[3]

Burma—Union of Burma Aircraft Act 1934 (XXII of 1934). 5 pages. Aircraft Manual (Revised edition), Government Printing, Rangoon, 1953.

Canada—Aeronautics Act 1919, as amended up to 1952. 8 pages. Cloutier, Queen's Printer, Ottawa, 1954.

Ceylon—Air Navigation Act 1950. 37 pages. Ceylon Government Press, Colombo.

Chile—"Decreto-Ley" of May 15, 1931. French translation in *Revue générale de droit aérien*, Vol. I (1932) pp. 670-684.

China (Taiwan)—Civil Aeronautics Law 1953. 19 pages (101 articles). Publication of the government only in Chinese.

Colombia—Ley sobre Aeronáutica Civil 1938, in Abelardo Gomez Naranjo, Derecho Aéreo, pp. 95-118, Escuelas Gráficas Salesianas, 1938.

Costa Rica—Ley General de Aviación Civil 1949. 24 pages. Imprenta Nacional, San José, 1949.

Cuba—Ley Decreto, 1954. Gaceta Oficial (December 28, 1954).

Czechoslovakia—Law relating to Air Navigation 1925. 32 pages. French text printed in Paris, Imprimerie Nationale, 1925.

Denmark—Civil Aeronautics Act 1923 (Law no. 175), as amended by Law no. 124 of May 7, 1937. Official Publications, Schultz Tryk, Copenhagen, 1937. French translation in *Revue juridique internationale de locomotion aérienne*, 1923, p. 516-530.

Dominican Republic—Ley no. 1915 sobre Navigación Aeréa 1949. Gaceta Oficial, Año LXX, no. 6894. And also booklet of 24 pages, Imp. Vda Garcia Suc., Ciudad Trujillo, 1949.

Ecuador—Ley de Transito Aeréo 1936. 59 pages. Publication of the "Ministerio de Defensa Nacional," Imprenta Nacional, Quito, 1936.

Egypt—"Decret-loi" of May 1935, in "Recueil des législations egyptiennes de l'aviation," pp. 14-18. Imp. nationale, le Caire, 1954. Same publication in Arabic.

El Salvador—Ley de Aeronáutica Civil y Reglamento de Aviación Agricola. 146 pages. Publication of the "Ministerio de Defensa," San Salvador, 1956.

Finland—Law regulating Air Navigation 1923. French translation in *Revue juridique internationale de locomotion aérienne*, Vol. 7 (1923), pp. 531-532.

France—Code de l'Aviation civile et commerciale, 1955, in "Journal official," December 6, 1955.

Germany—Air Navigation Act promulgated August 21, 1936, in Dr. jur. A. Wegerdt, Deutsche Luftfahrtgesetzgebung, Verlag Pohl & Co., München, 1948.

Greece—Loi relative à la navigation aérienne, 1931. French translation in *Revue générale de droit aérien*, Vol. I (1932), pp. 685-704.

---

[2] Another publication has been made by the "Ministère des Communications, Administration de l'Aéronautique," Hayez, Bruxelles, 1954.

[3] The text (35 pages) exists also in a publication of the Ministério da Aeronáutica, Impresa Nacional, Rio de Janeiro, 1945.

Guatemala—Ley de Aviación Civil 1948, in "El Diario Oficial (Centro America) no. 9, tomo 59" (April 7, 1949). Also in a mimeograph publication of the "Ministerio de Communicaciones y Obras publicas (40 pages).

Honduras—Ley de Aviacion 1940. 23 pages. In "La Gaceta, No. 14.114, Año LXXV" (May 29, 1950).

Hungary—Prescriptions régissant la navigation aérienne 1922. French translation in *Revue juridique internationale de locomotion aérienne*, Vol. 7 (1923), pp. 468-480.

Iceland—Air Traffic Law 1929 (as revised). 26 pages. Mimeograph Publication of the Government (Icelandic text and translation).

India—Aircraft Act 1934. 5 pages. Indian Aircraft Manual (Revised edition, corrected up to June 1, 1952), Government of India Press, Calcutta, 1952.

Iran—Law of Civil Aviation 1949. 7 pages. Publication of the Department of Civil Aviation; Bank Melli Iran Press, Teheran (text in Persian and English translation).

Iraq—Air Navigation Law 1939. 6 pages. In the Wagayi al Iraqiya, no. 1729 (August 30, 1939).

Ireland—Air Navigation and Transport Acts 1950. 43 pages. Publication of the Stationery Office of Dublin, 1950 (text in Irish and English).

Italy—Codice della Navigazione (1942), in "Raccolta Ufficiale delle legge e dei decreti del Regno d'Italia," Anno 1942, Vol. 1 ter. French translation in *Revue française de droit aérien*, Vol. 3 (1949), pp. 52-80, 161-177, 297-315, 391-399.

Japan—Civil Aeronautics Law and Regulations of Japan. 243 pages. Fiyi Kogyo Publishing Co. Ltd., Tokyo, 1955 (English translation).

Lebanon—Civil Aviation Law 1949. 21 pages. Publication of the "Ministère des Travaux Publics, Service des Communications aériennes." Imp. Ad. Dabbour, Beyrouth, 1949 (text in French, English, and Arabic).

Luxemburg—Loi relative à la réglementation de la navigation aérienne 1948. Ext. of the "Memorial," no. 11 of February 14, 1948; Imp. Victor Buck, Luxemburg.

Mexico—Ley de Aviación Civil 1949, in "Leyes y Reglementos sobre Communicaciones y Transportes," 2d Edit., Tomo I, pp. 88-100. Información Aduanera, Mexico.

Morocco—Dahir relatif à la navigation aérienne 1928, in the "Bulletin official de l'Empire Chérifien," no. 636 (October 30, 1928).

Netherlands—Loi sur la navigation aérienne 1926, as amended in 1935, in L. H. Slotemaker's Luchtvaartwet (pp. 1-83). W. E. J. Tjeenk, Zwolle, 1940. (Text in Dutch.)

New Zealand—Air Aviation Act 1948, in the Statutes of New Zealand, 1948, I, p. 130. Reprinted by E. V. Paul Government Printer, 1948 (10 pages).

Nicaragua—Ley de Aviación Civil 1944, in "Le Gaceta," No. 175 (August 22, 1944). Reprinted by the "Ministerio de Aviacion," Managua, 1945 (31 pages).

Norway—Law regarding Air Navigation 1923, as amended in 1949. 15 pages. In "Bestemmelser om Luftfahrt," Merkantile Bok—and Akcidenstrykkeri, Oslo.

Pakistan—Aircraft Act 1934. 5 pages. Aircraft Manual (corrected up to October 1950), Dilawar Ali Shah, Lahore, 1950.

Panama—Decreto no 89 relating to Air Navigation 1929. French translation in *Droit aérien*, 1931, pp. 46-55.

Philippines—Civil Aeronautics Act 1952. 34 pages. (Mimeograph Publication of the Government).

Poland—Loi relative à la navigation aérienne 1928. French translation in "Revue juridique internationale de la locomotion aérienne," Vol. 12 (1928), pp. 451-470.

Portugal—Decreto no. 13.537, 1927. French translation in *Revue juridique internationale de la locomotion aérienne,* Vol. 11 (1927), pp. 444-447.

Rumania—Decret-loi sur la navigation aérienne 1936. "Moniteur officiel," no. 235, I (October 8, 1936).

Spain—Ley de bases de la Navigación Aérea 1947, published in the Boletin Official, January 1, 1948, p. 2. Reprinted in "Legislación Aeronautica Española," pp. 65-79; in Publication of the Instituto Francisco de Vittoria, no. 4; Consejo Superior de Investigaciones Cientificas, Madrid.

Sweden—Loi concernant la navigation aérienne, 1922. 27 pages. P. A. Norstedt and Söner, Stockholm, 1928 (French translation).

Switzerland—Loi féderale 1948, in the "Recueil des lois de la Conféderation," 1950, I, p. 491; in "Feuille Fédérale," 1949, I, 157; in the "Revue française de droit aérien," Vol. 3 (1949), pp. 29-51.

Syria—Law regulating air transportation and navigation 1949, in the "Journal Officiel" no. 66 of December 12, 1949. Reprinted by the Ministry of Public Works and Communications, Department of Civil Aviation (42 pages), Imp. of the Syrian Republic (Text in French and English). French text in *Revue française de droit aérien,* Vol. 4 (1950), pp. 37-50.

Thailand—Air Navigation Act 1954, in the Government Gazette, no. of September 14, 2497 (1954). Reprinted by the Government (16 pages) with English translation.

Tunisia—Decret beylical relatif à la navigation aérienne 1935, in Lacombe. Les Lois de l'Air, Vol. I, pp. 273-287.

Turkey—Regulations on Aerial Navigation 1925. English translation in Journal of Air Law and Commerce, Vol. 23, pp. 465-472.

Union of South Africa—Aviation Act 1933 (amended in 1946). 27 pages. Government Printer, Pretoria, 1933 (Text in Afrikander and English).

United Kingdom—Civil Aviation Act, 1949 (12 and 13 Geo. 6, ch. 67). 90 pages. Stationery Office, London.

United States—Civil Aeronautics Act 1938 (as amended to date), in Aeronautical Statutes and Related Material, pp. 1-83. Government Printing Office, Washington.

Uruguay—Código de Legislación Aeronáutica 1942. 33 pages. Imprenta Militar, Montevideo, 1942.

U.S.S.R.—Code de l'Air, 1932. English translation in Air Law Review, Vol. 4 (1933), pp. 158-165, and French translation in *Revue générale de droit aérien,* 1932, pp. 417-428.

Venezuela—Ley de Aviación Civil 1955. 8 pages—in the "Gaceta Oficial," Año LXXXIII (April 21, 1955), Numero 452 Extraordinario.

Yugoslavia—Decree relating to Air Navigation 1949, in the "Journal de Service de la République," no. 47 (July 4, 1949).

CODIFICATION OF LEGISLATIVE TEXTS ON CIVIL AND COMMERCIAL AVIATION IN FRANCE

By Louis Cartou

Professor at the Toulouse University
Chief of the Legal Office of Air-France

THROUGH a Decree of November 30, 1955,[1] issued under the Law of May 28, 1953,[2] the legislative provisions relating to French Civil and Commercial Aviation were codified. This Code is part of a larger work of codification, undertaken pursuant to a Decree of May 10, 1948,[3] establishing "a superior commission charged with the study of the codification and simplification of legislative and regulatory texts," usually referred to as the "Precodification Commission."

The unusual feature of these codifications lies in the fact that the codes issued pursuant to the decree of 1948 are not the work of the legislature, which does not participate nor even ratify, but exclusively of the Executive power, assisted by the Precodification Commission.

The Law of May 28, 1953 defines the framework of the codification of laws relating to civil and commercial aviation in complete agreement with the general spirit of the decree of 1948. Article 1 of the law specifies the object of the codification, namely, "the legislative texts concerning civil and commercial aviation," and designates the competent authority, namely, the Executive power acting "through a Decree rendered by the 'Conseil d'Etat' upon advice of the Superior Commission." Article 2 limits the powers of the competent authority, as follows: "The Decree shall make all modifications of form in the laws presently in force, which may appear necessary in the process of codification, but no amendment of substance shall be made."

From the text of the Law of May 28, 1953, it clearly appears that the Code was to be only a rearrangement in logical order of the legislative materials concerning aviation. But there was a great difference between the aim of the codification and the means for achieving it, in other words, between the object and the method. The object was to codify laws, i.e., to disassociate articles (sometimes parts of articles) comprising these laws and to group them again pursuant to a different plan, thus establishing a new law, having the same meaning and containing the same provisions as the codified laws.

But such a task, which is not an easy one in any event, met with an additional difficulty: it was to be left to a simple decree to modify laws as to form, without the slightest change in substance. Not only

[1] "Journal officiel" of December 6, 1955.
[2] "Journal officiel" of May 29, 1953, page 4843.
[3] "Journal officiel" of May 13, 1948.

could the Decree not remedy absurdities which might be brought to light during the codification process, but the job required, in addition, the greatest delicacy of handling since it is not always easy to distinguish between an amendment of substance and a modification of form.

The Decree of November 30, 1955 has made, as a result, a new presentation of existing legislative texts; but it should be examined to determine whether the Decree has remedied the legal uncertainties of the previous legislation.

— I —

The Code of Civil and Commercial Aviation is but a presentation in a new form of existing legislation. In principle nothing of substance has been changed; every provision of a legislation familiar to air lawyers has been maintained; the legislative sources are enumerated in Article 198 of the Code.[4]

The Code is divided into two parts—the codification proper constitutes the first part, which is followed by a concordance between the articles of the Code and those of the codified texts. The second part rounds out the first by an annex, in which are published the legislative provisions relating to civil aviation in the French Union and the International Conventions to which France is a party: Warsaw Convention, Chicago Convention, Chicago Transit Agreement. This Annex raises no problems since it is only a collection of texts of great practical value. Therefore the present study will be limited to the codification itself.

The codification has all the appearances of a well-arranged work, dealing in orderly fashion with the major problems of civil aviation. It is subdivided into five Books, each one devoted to one of the following problems: Aircraft (Book I), Airports (Book II), Air Transport (Book III), Flight Personnel (Book IV), Light Aviation and Sport Aviation (Book V). Each book constitutes the legal basis for the matter with which it is concerned.

Book I is devoted to the laws governing Aircraft and comprises 58 articles taken almost exclusively from the provisions of the Law of May 31, 1924 (a portion of this law however has been allocated to other Books, in particular Book III concerning Air Transport). It is subdivided into Titles corresponding more or less to the divisions of the Law of 1924, each Title dealing with one of the major matters relating to aircraft: civil status of aircraft (registration, nationality, ownership, air traffic rules, damage to third parties, penal sanctions for illegal operation. Strictly from the point of view of codification, this book possesses no originality.

---

[4] Law of May 31, 1924 as amended, relating to air navigation; laws of March 30, 1928 and April 4, 1953, relating to flight personnel; law of July 4, 1935, establishing air easements; law of September 19, 1941, concerning commercial aviation; ordinance of October 24, 1945, creating the Paris Airport; laws and decrees of October 2, 1946, August 1, 1950, September 24 and 30, 1953, relating to aerodromes; ordinance of June 26, 1945 and September 26, 1953, relating to air transport; various provisions of Financial Acts (Annual Budget).

In contrast to Book I, Book II is not a mere literal transposition, but is a basic re-editing of the law of airports, achieved by regrouping various laws and decree-laws. Preceded by a general definition of airports (taken from Article 26 of the law of May 31, 1924), Title I of the Book is made up of the provisions of the law of July 4, 1935 on easements created for the benefit of air navigation. Title II deals with "airports open to public air navigation" and is only the transposition of most of the provisions of the Decree of September 24, 1953, with which are mingled those of the law of October 2, 1946 on classification of airports. The other Titles of the Book are devoted to the Bâle-Mulhouse airport (law of August 1, 1950), to airports of general interest located outside the Metropolitan Territory (Decree of September 30, 1953), and finally to various penal provisions concerning airports. Each one of the Titles of Book II is therefore quite homogeneous.

Book III, which deals with Air Transport, is somewhat more complex and gives evidence of more boldness in the handling of the original texts. This essential Book is subdivided into three Titles preceded by a general definition of air transport taken from Article 1 of the Decree of September 26, 1953: "Air transport consists of the movement by aircraft, from one point to another, of passengers, mail and goods." Title I, which deals with the contract of carriage, is essentially a reproduction of the provisions of the law of May 31, 1924 (the only addition being Article 15 paragraph 1 of the law of April 4, 1953 on flight personnel, which allows the pilot in command to offload any passenger who may endanger safety or good order). The following Title, short but important (Articles 127 to 136), regulates "Transport Enterprises." In this Title the Code, using the Decree of September 26, 1953 on "coordination" as a base has included some of the provisions of the law of May 31, 1924 and of the law of September 19, 1941. Finally Title III, dealing with the regulation of Air-France, is taken from the law of June 16, 1948 in a curiously simplified form.

Book IV on Flight Personnel brings us back to simplicity by devoting one long Title (Articles 146 to 193) to professional airmen and one short Title (Article 194) to occasional airmen. This Book picks up the law of April 4, 1953 in its entirety and deals in accordance with a uniform plan with everything that constitutes the regulation of aircrew: classification, definition, terms of reference of the crew and of the pilot in command, contract of employment, indemnities in case of disablement, discipline.

The Code ends with Book V, short and heterogeneous, dealing with Light Aviation and Sport Flying (Articles 195-197).

Finally, Article 198, which enumerates the various provisions of law that have been codified, provides that: "This Code, subject to the conditions of the law of May 28, 1953, is substituted for such legislative provisions." The last sentence—apparently harmless "boilerplate" —raises an embarrassing question of the general legality of the Code.

— II —

What is to be expected of a Civil Aviation Code is that it constitutes a clear legal document destined to replace prior legislative chaos. This clarity, however, must not be achieved at the sacrifice of juridical dependability. It is important that the Code be without surprises and therefore complete. It must not subject the one who uses it to the disagreeable surprise of finding that an essential law has been omitted or that articles which never should have been codified have been included and are illegal.

Does the Civil Aviation Code offer these expected guarantees; is it clear, complete and dependable? We do not think so and the Code appears to us to be laden with a great number of elements of legal unreliability.

The major portion of the defects of the Code stems from the inadequacy of the technique and of the instrument of codification, namely the Decree. The decree is a neutral instrument; it must not introduce any modification of substance, and accordingly it is incapable of making indispensable amendments to the codified texts; it perpetuates their defects, their obscurities and their gaps. Nor does this neutrality of the Decree alter the fact that codification itself has certain inherent difficulties, even if codification is limited to modifications in presentation. By the very fact that the Code codifies all the law, and nothing but the law, it is bound to be the cause of obscurities. On the other hand the Decree is a difficult instrument to handle: the difference between an alteration in form and an alteration in substance can be very slight.

Therefore, the Civil Aviation Code is menaced not only by paralysis but also by illegality, mainly because of the essential defects of its instrument; but this does not explain everything, and some of the obscurities of the Code seem to us to have resulted from errors or just simple omissions. The elements of unreliability may be classified under three headings: errors, obscurities and illegalities.

A. Errors in the Code

Most of the discrepancies of the Code have some explanation; there are some, however, for which we were unable to find a rational one. Among these is Article 17, made up of Article 19 paragraph 1 and Article 8 of the law of May 31, 1924, which read respectively as follows: "Aircraft may freely be flown above French territory subject to the provisions are Article 8" (Article 19 paragraph 1); "Foreign aircraft may only be flown above French territory if this right is granted them by a diplomatic convention or if they have received an authorization to this effect, which shall be special and temporary" (Article 8).

Now Article 17 of the Code, which takes up these matters, is drafted as follows: "Aircraft may be flown freely above French territories. However, foreign aircraft may not be flown above French territory,

etc. . . ." The Code, for no good reason, makes a distinction between French territory and French territories. This could lead to many fanciful interpretations. France is sovereign in the airspace above all territories under its control, and by statute it regulates flight in these spaces. It is quite conceivable that a law could proclaim freedom of flight above the territories comprising all that falls under Article 2 of the Chicago Convention, that is to say all territories placed under "the sovereignty, suzerainty, protection or mandate" of France, while restricting flight over French territory in the narrow sense, French Territory being understood as meaning Metropolitan France. Thus what is probably only a drafting slip of the Code might have the effect of opening the skies of the French Union to aircraft of all nationalities subject only to the condition that police regulations be observed.

More curious yet is the elimination of Article 6 of the law of June 16, 1948 (concerning the status of Air-France). A simple clerical error is improbable here: the reference chart set up at the end of the Code specifies clearly that this text is "not codified." This is, however, the law which creates the positions of, and specifies the nomination procedure for President and Director General of the National Company. These two offices still exist; their powers and the cessation of their functions are still defined by Article 140 of the Code, which just reproduces on this point the law of June 6, 1948 (Article 8). It is difficult to perceive why Article 6 of this law has disappeared from the Code without leaving any trace or subsitute.

B. Obscurities in the Code

The Code furthermore harbors sources of unreliability due to the very nature of the codification decree. We have seen that this decree is a neutral instrument without power to alter substance and incapable of remedying even known defects in the law. Such neutrality has inherent defects in itself: it obliges the draftsmen of the Code to include all the law and nothing but the law. Nothing but the law was responsible for the gaps in it; and all the law merely underlines and revives contradictions. Gaps and contradictions are quite apparent when one examines the articles of the Code concerning airports.

Gaps. Book II on Airports gives the impression of great straightforwardness. Apart from provisions concerning easements and those relating to airports to which a special status has been given (Paris, Bâle), the essence of this Book is reduced to the provisions of Title II relating to airports open to "public air traffic." This Title is subdivided into chapters covering: creation, classification, operation and airport charges.

The straightforwardness however is but an illusion: the Decree-law of September 24, 1953 and the law of October 2, 1946, the provisions of which constitute Title II, do not embrace all the statutes on airports. To begin with, it is regrettable that this Code, which ought

to cover all basic principles, is silent on airports not open to "public air traffic." These airports are governed by regulations and therefore could not be codified.

But more important, there exists a provision which remains outside the Code though it has a great importance as a principle: the Decree of December 31, 1949. This decree governs the status of non-autonomous aerodromes in Metropolitan France and in its overseas territories. They are therefore, rules which define and regulate the airports concerned according to totally different standards from those laid down in Title II of Book II: applicability of the rules is based not on the use to which the airports are put but on the type of management. This decree establishes classifications foreign not only to those of the Code but to the law presenting its applicability, as well, and distinguishes between main aerodromes and secondary aerodromes. The decree of December 31, 1949 provides, therefore, for a particular status ignored to the Code. One does not see how this material could have been hinged on the Code. For a decree to be attached to a law it must be a measure giving effect to the law as a development of the principle previously defined in the law. However, the simple decree of December 31, 1949 does not reflect any provision of the Code and cannot therefore appear as a measure applying the Code. This decree is thus an autonomous text based on a principle of its own. In consequence, the Code is an incomplete document, as it does not embody all the principles.

The Contradictions. By codifying the law and only the law, the Code has created gaps; inasmuch as it has codified all the law, it has, if not created, at least underlined and aggravated some of the contradictions of existing law.

The rules on aerodromes again offers an example of codified contradiction; definition and classification present one of the difficulties. A given aerodrome may be defined and classified according to various criterions: who owns the land (State owned); who initiated the project (created by the State); who is responsible for its technical or commercial management (concession, direct State operation); the importance of the airport (main or secondary); its use or purpose (open to "public air navigation"). Every statute and all coherent juridical systems must have as their starting point a common concept or a general definition, sufficiently broad to embrace all distinctions and partial definitions. However, so far as aerodromes are concerned, the designation of a basic criterion, which is indispensable to a general definition, is lacking: successive regulations, particularly the law of May 31, 1924 and the decree of September 24, 1953 have adopted divergent standards (probably due to differences in legal or technical concepts). Codification has now erased this historical aspect and has united in a single document these widely different concepts whose relation is not clearly shown; Article 23 makes a distinction between public airports, airports open to the public, and private airports legally established; Article 25

is concerned with custom airports; all of Title II of Book II refers to "airports open to public air navigation" (numerous subdivisions being provided in this category); Article 110 provides for penal provisions relating to the punishment of offenses committed on airport property and prohibited by the regulations governing aerodromes "dedicated to public use."

It is apparent that there are contradictions at least in the terminology. The Code did not create them, but by bringing them together has brought them to light. The technique consisting in codifying laws without distinction as to their very different ages, can even impede the necessary evolutionary process which experience brings to legislation. Indispensable "legislative erosion" exercises a selection among legal notions by letting those which have lost their practical value fall into oblivion; codifying these concepts risks restoring them to life.

C. The Illegalities of the Code

The definition and classification of airports is proof of the paralysis of the Code with regard to the laws codified. The draftsmen could not evade this paralysis without falling, even involuntarily, into the field of illegality—the frontier between modifications of form and of substance being too uncertain. Therefore, there is nothing astonishing in the fact that the Code is strewn with illegalities of detail, which seem involuntary if not inevitable. However, as these illegalities accumulate they have finally altered greatly the nature of the legislation on a particularly important point—Air Carriage.

1. *Minor Illegalities.* These are the typical illegalities due directly to the codification process and result from additions or omissions made by the draftsmen of the Code.

a. What can be called *illegality by action* is the result of an involuntary breach of the very slender frontier between the modification of form and that of substance. The codification has mainly been a matter of changing the location of texts, separating laws from their context and putting them in a different context. Such an operation obviously entailed the risk of altering the meaning of the displaced provision.

A typical example of a change in meaning of a displaced provision is found in the way the Code makes use of certain provisions of the law of September 19, 1941. This law had enacted a statute for civil aviation that, though never repealed, had in fact remained ignored. The greater part of this law was not codified, but some articles were placed in the Code as attachments to the provisions of the Decree-law of September 26, 1953 on coordination. Thus Article 19 of the 1941 law provided that "the enterprises which have been certificated or authorized must, upon request of the civil servants responsible for their supervision, place at the disposal of such civil servants all documents necessary for the fulfillment of their mission."

This text is now Article 135 of the Code (the "certificated" enterprises have been dropped out, and the text is thus incomplete—a first illegality). But Article 19 of the 1941 law codified in this manner has in reality changed meaning: the "authorized enterprises" of Code Article 135 designates the concerns which have been authorized in accordance with Article 127 of the Code, that is, the reproduction of the provisions of the decree-law of September 26, 1953. However, the authorization mentioned in the 1941 law and that of the 1953 decree-law are two entirely different things. By including Article 19 of the 1941 law in Article 135, the Code has in fact completely changed the legal meaning of the codified text.

This simple example reveals the essential difficulty present in separating particular provisions from their context and placing them in the middle of very different laws without either altering their significance, or without creating something different, and without in fact disregarding the terms of the law of May 28, 1953.

b. A change in substance could also result from the omission of a law. The reference charts at the end of the Code show a great mass of material as "not codified."

In principle non-codification could not mean abrogation. The Code, which is a mere decree, has no power to repeal laws (Articles 27, 28, 29, of the law of May 31, 1924 that the Code indicates as repealed were in fact repealed by the Decree-law of September 24, 1953).

When a law relating to the subject matter codified has not been included in the Code, its omission is susceptible of several interpretations. Such omission appears entirely appropriate where it causes the disappearance of transitory and formal clauses of a law which have lost all interest.

Still within the realm of what is perfectly appropriate is the omission from the Code of a law which could not have been codified without contradiction or absurdity. Thus the law of September 19, 1941, regulating commercial aviation, had never been formally repealed, but it was absolutely irreconcilable on several points with the decree-law of September 26, 1953, on coordination. Thus, the law of 1941 made the franchise the basis for regulating the operation of air transport lines, which the decree-law of September 26, 1953, totally ignored and subjected air transportation to a system of authorizations and permits. If both laws had been codified, only contradiction could result. The problem was solved by the non-codification of those provisions of the law of 1941 which were incompatible with the decree of September 26, 1953. In this instance non-codification of the earlier law can be interpreted as a formal recognition of repeal by implication contained in a subsequent legislative enactment.

Apart, however, from these perfectly explainable and legitimate instances, there remain cases which are less justifiable. The drafters of the Code have in fact "not codified," on their own authority, certain

laws which have not been repealed, either expressly or by implication. This is the case, for example, of several articles of the law of June 16, 1948, regulating Air-France, particularly Article 12, which is the legal basis for the financial arrangements between the company and the government. In this case, how is the failure to codify to be regarded? Article 198 of the Code provides that "Subject to the provisions of the law of May 28, 1953, this Code shall be substituted" for the legislative enactments cited in the article. Should it not be concluded that if the Code "is substituted" for the laws it codifies then only the Code is applicable, and the laws enumerated therein continue to have effect to the extent they have been codified? If this interpretation is correct, it must be concluded that the non-codified provisions are no longer applicable and that as a result, failure to codify is the equivalent of repeal. But since repeal is certainly the most radical change in substance that any law can undergo, it follows that non-codification is contrary to the law of May 28, 1953.

All such illegalities, born of changes which have been made under various guises in the laws and decrees codified, are only the most striking of the technical defects of the codification. But there remains one area, however, where the petty illegalities, by reason of their additive and cumulative effect, have brought about a transformation of the legislation, one where the authors of the Code, by acting in excess of their powers—not merely through the unhappy handling of a poorly conceived instrument—have dangerously trespassed upon the legislative domain.

2. *Transformation by the Code of Rules Relating to Transportation by Air.* After the Ordinance of June 26, 1945 which nationalized air transport, the early rules governing civil air transport were limited to the law of June 16, 1948 organizing the National Company, Air-France. Later on private companies were created notwithstanding the law of September 19, 1941, and having gone into the field of regular airline operation they could not be overlooked. That was the reason for the Decree-law of September 26, 1953 regulating air transport coordination.

The 1948 law and the 1953 decree make up the present statutory structure of Air Transport. The decree of 1953 is, moreover, limited in its purpose, its duration and its effects. *Its purpose is limited*: the coordination decree's sole aim is to regulate competition arising from the existence of private operators, beyond the scope of any legal provision, and to subject this competition to some sort of control. *Its duration is limited* and will end with the enactment by Parliament of a civil aviation statute: "The provisions of the present decree have the sole purpose of establishing the rights and duties of private operators and of allowing the government to perform quickly the coordination that appears indispensable, while leaving to Parliament, where a bill has already been introduced, the general organization of French air transport and the delimitation of the respective fields of activity

of the National Company and of private operators" (extracted from the "exposé of motives" preceding the 1953 decree). Finally with regard to the National Company, to the extent this text is applicable to it, *it is only on a subsidiary basis.* Article 4 of the 1953 decree which enumerates some of the duties imposed on authorized operators, states that: "The provisions of this article do not impair the application of the special rules for the management and supervision [of the Company] contained in the law of June 16, 1948 creating the National Company, Air-France."

The civil aviation code has incorporated both the 1948 law and the 1953 decree; but the codification was accomplished in such a way as to upset completely the meaning of the legislation, not only on minor points but in its very essence. It may be stated that in the Code the provisions of the decree of September 26, 1953 in effect constitute a permanent and basic regulatory action, which, so far as Air-France is concerned, loses its subsidiary character.

The Code has transformed the provisions of the 1953 decree into permanent ground rules for air transport. The mere fact of including these provisions in the Code, added to the inability of Parliament to enact the statute so often announced, would suffice to ensure this result. The 1953 decree, anonymously lost in a permanent Code, has excellent chances of becoming definitive. This result appears to be in accordance with the views of the draftsmen of the Code, who eliminated from the codified laws all references to a future civil aviation statute; this is the case of Articles 1 and 10 of the law of June 16, 1948, which have been codified (Articles 137 and 142), but with the omission of any provisions concerning a future permanent act. The drafters therefore gave to the provisions of the 1953 decree, a permanent and definitive character which it did not originally have.

What is more, the Code has eliminated the subsidiary character of the 1953 decree with regard to its application to the National Company. In the Code the articles of the decree become the primary legal basis of air transport. First, this is the result of certain modifications made in the codified laws. Thus Article 1 of the law of June 16, 1948 subjects Air-France to "this *law*" and where no provision is made therein, to the laws on corporations. As codified, this article (Article 137) subjects Air-France to "this *Code*" (and where no provision is made therein to the laws governing corporations). The *Code,* however, is much broader than the *law* of 1948, and in particular comprises the decree of September 26, 1953. The National Company is therefore made subject to this decree, and the effect is even more telling, in view of the fact that Article 4 of this decree, which made provision for "the special rules of management and control provided by the law of June 16, 1948," has not been codified. Therefore, through these modifications, the Code has destroyed the priority or independence which the laws governing Air-France enjoyed with regard to the 1953 coordination rules.

Furthermore, this new predominance of the provisions of the 1953 decree is confirmed by the non-codification of certain laws which reserved to the National Company a special status. The most significant elimination in this respect is that of Article 12 paragraphs 1 and 2 of the law of June 16, 1948, as amended by the decree of September 30, 1953. This law governed relations between the Company and the State: it was left to the Company to achieve financial equilibrium in its operations, but the duties imposed upon it in the general public interest were to be delimited and provided for by contracts with the State. This system replaced the uncertain system of overall subsidy. Non-codification has caused the disappearance of this provision, which certainly cannot be said to have lost all practical interest. The Code has replaced these provisions by a more general principle taken from a Finance law of December 31, 1953 (very much altered in form) and inserted in Article 137, which forbids any subsidy to Air-France in respect of routes operated in competition with other French air transport companies.

It therefore appears quite clear that, both with regard to Air-France and to the general organization of air transport, the Code has so modified the legislation as to invade the field of policy itself. It has created a new statute on commercial aviation by changing the nature of existing laws, and this quite obviously is *ultra vires* on the part of the draftsmen of the Code.

* * *

It thus appears to us, at the close of this study, that the Civil Aviation Code is an instrument which passes with one jump from stagnation to an over-stepping of powers. Its application is therefore rendered uncertain and dangerous. It can be noted in fact that the most recent laws, decrees or other acts, published in the "Journal Officiel" do not refer to the articles of the Code but to the laws themselves.

Such are the defects of this Code, mostly due to faulty methods and techniques. One can ponder, however, if the instrument given to the drafters is alone responsible.

All that precedes appears to be a case against a method and against a bad use of inadequate means at hand. But in reality the reasons behind the defects of the Code lie deeper: if the method and the instrument turn out to be faulty, it is because their purpose was to apply a wrong concept of codification to a faulty concept of the law.

Indeed the codification decree was to apply to a faulty legislation. In general the 1948 codification movement was to remedy this faulty legislation "sometimes enacted in a hurry,"[5] but above all forgetful of tried principles. "The purpose of the law" says Portalis "is to define in broad terms the general maxims of law; it is to create in consequence

[5] Report on the Decree of May 10, 1948. See Bulletin Législatif Dalloz, 1948, page 473.

fruitful principles and not to go into the details of questions which may arise on each matter."[6]

Forgetful of these principles, the modern legislature has in every field let law grow in elaborate details while leaving essential matters to regulation by decree. It is indeed this type of legislative situation that the codification movement was to combat according to the preamble of the decree of May 10, 1948: "Accordingly it will be possible in particular to take action against the tendency to regulate matters by law relating to the application of given principles which generally belong in the field of regulation."[7]

The material on which the draftsmen of the Code had to work was therefore bad in the first place; the concept of codification itself was no better. Moreover, one can scarcely talk of "codification," the movement of 1948 being so completely opposed, in spirit and method, to the great codes of history, from the Roman law of the XII tables to the codes of the nineteenth century. To produce their great works, those legislatures looked to the past, and with all the authority at their command, studied proved acts, customs and law, modified and adapted them, and produced works which, if not good for all time, were of lasting quality. "Codes of peoples are made with time, but strictly speaking, they are not made" (*Portalis*). The codification of 1948 is not any such adaptation for the future of solidly established legislation. The goal was purely short range: to bring a measure of order out of legislative chaos, without pretense of lasting quality—in order to permit the legislature itself to know the law and to permit amending it without too great a risk of getting lost in its toils. It was only a question of making intelligible a very imperfect set of laws. Was such a task—difficult enough for a sovereign legislature—within the reach of an executive branch endowed with inadequate powers?

---

[6] See J. E. M. Portalis "Discours, rapports et travaux sur le Code civil." Paris, 1844, page IV.

[7] Report on the law of May 10, 1948.

SCANDINAVIAN CO-OPERATION IN THE FIELD OF AIR LEGISLATION

By Torsten Nylen

First Secretary of the Royal Board of Civil Aviation, Sweden. LL.B. University of Stockholm, Sweden; LL.M. McGill University, Montreal, Canada.

REGIONAL legislative co-operation in Scandinavia dates back to the end of the 19th century. In 1876, the Swedish Parliament recommended a program for such co-operation in the field of civil and commercial law. The first practical result was a statute on bills of exchange (since 1932 founded on a wider international basis); this has been followed by a considerable number of important statutes on patents, insurance, family relations, etc.[1] The most well-known result of this close collaboration is perhaps the Scandinavian Sale of Goods Act.[2] Air legislation in the Scandinavian countries is also a result of joint efforts.

At present the most important statute on Swedish public air law — the one which contains the basic principles governing civil aviation — is the Royal Decree on Air Navigation of May 26, 1922 (No. 383), which, in the course of time, has had to be amended several times as aviation developed technically. On April 20, 1928, the decree was followed by a Royal Proclamation regarding its application (No. 85), regulating in greater detail certain of the matters dealt with by the decree in a more general manner. In addition, the proclamation contains a number of enactments on matters not dealt with in the decree. Both these statutes must be studied against the background of the Paris Convention of 1919, to which Sweden adhered in 1927. In addition to the above decree and the proclamation regarding its application there are a number of other laws dealing with aviation.[3] The Danish and the Norwegian statutes relating to the same subject correspond, in substance, with each other and with the Swedish statutes, although legislative co-operation at the time of their enactment was not so close as it is today.

---

[1] For general information about Scandinavian co-operation in the field of law, see, for instance, S. Ljungman, "L'unificazione del diritto privato scandinavo," Rivista trimestrale di Diritto e Procedura Civile 1949, fasc. 4; M. Matteuci, "The Scandinavian legislative co-operation as a model for a European co-operation," Liber Amicorum of Congratulations to Algot Bagge, Stockholm 1956; and A. Mälmstrom's report in Europäische Zusammenarbeit im Rechtswesen, Tübingen 1956.

[2] See, e.g., T. Almén, Das skandinavische Kaufrecht (ed. Neubecker), Vol. 1-3, Heidelberg 1923, and G. Lagergren, Delivery of the Goods and Transfer of Property and Risk in the Law on Sale, Stockholm 1954.

[3] For a short survey of current Swedish legislation in the field of air law, see K. Grönfors, "Grundzüge der schwedischen Luftfahrtgesetzgebung," Zeitschrift für Luftrecht 1952, p. 44 et seq.

The rapid development of civil aviation during the final phases of World War II made it clear, however, that further international rules for civil aviation must be evolved. An international aviation conference was therefore held in Chicago in 1944 and charged with replacing the Paris Convention by a new treaty. The work of the conference resulted in the Convention on International Civil Aviation, signed at Chicago on December 7, 1944, as well as in the International Air Services Transit Agreement, and the International Air Transport Agreement, to all of which Sweden has adhered; Denmark and Norway have not adhered to the Transport Agreement, but have adhered to the others.

When, on September 27, 1946, Sweden ratified the Chicago Convention, the need to revise the provisions of Swedish public air law became urgent. In November, 1946, the Ministry of Communications declared that such a revision should be undertaken and that the work should, as far as possible, be carried on in co-operation with the other Scandinavian States.[4] An expert was charged with making a preparatory analysis, and a secretary was appointed to assist him in this task. A preparatory report on the matter was handed in to the Ministry of Communications during 1949.[5]

In 1948 a group of experts, appointed in 1945 to revise the provisions of Swedish private air law, were charged by the Ministry of Justice with the drafting of the acts that had to be adopted following the ratification by Sweden of the Convention on the International Recognition of Rights in Aircraft, opened for signature at Geneva on June 19, 1948. In 1950 – after the above-mentioned preparatory report regarding new provisions as to public air law had been concluded – the task of the experts in private air law was extended to embrace public air law as well, their work to be based on the preparatory report. While this work was in progress, several conferences were held with the Danish, Norwegian, Finnish, and Icelandic legal experts; at these meetings specialists possessing practical aviation experience have also, as a rule, been present.[6]

On October 31, 1955, the group of Swedish experts submitted a draft of an Aviation Act to the Ministry of Justice. It should also be pointed out that in the meantime a special committee in the Ministry of Communications has been charged, in 1950, with drawing up proposals for regulations for the application of the Aviation Act. It is assumed that the work of this committee will be concluded in time to permit the new regulations applying the Act to come into force simultaneously with the Act, which is expected to take effect on January 1, 1958. In Denmark and Norway there are similar committees, and all these committees co-operate to a certain extent.

---

[4] We refer here to Finland and Iceland as well as to Denmark and Norway.

[5] The report was handed in in parts, on January 18 and 31, and on August 26, 1949.

[6] For a closer study see protocols of conferences held at Lillehammer and Helsinki in 1949; at Stockholm and Copenhagen in 1950; at Sola (Stavanger) in 1951; at Abo, Helsinki and Stockholm in 1952; and at Copenhagen in 1954.

In this connection a few words describing how the draft Act will be dealt with in Sweden before it is adopted may be of interest. Upon receipt of the draft of the experts, the Ministry of Justice transmits it to the authorities and other institutions concerned for comment. When their comments have come to hand, a legal expert of the Ministry of Justice sets up a protocol which, in addition to the proposed text of the Act, contains a survey of its origin and evolution, the report of the group of experts appointed to make the revision, and the comments made by the authorities concerned, together with the comments of the Minister of Justice.

This protocol is transmitted to the Law Council, which normally consists of three members of the Supreme Court and one member of the Supreme Administrative Court. It is presented to the Law Council either by an official of the Ministry of Justice or, has been the case with the Aviation Act by someone who himself has taken part in the preparatory work. The Law Council examines the text with the object of making sure not only that its provisions are comprehensible, clearly formulated, and in accordance with each other, with other Acts, and with general legal principles, but also that they are practical and suitable.

All observations, if any, are noted, and a further protocol is prepared, which is sent to the Ministry of Justice. The Minister of Justice then reports upon the matter to the King in Council, i.e., the Government, which must come to a decision regarding the draft and the possible observations of the Law Council. When the draft has been approved by the Government – possibly with amendments based on the observations of the Law Council – a Government Bill incorporating the protocol and the comments of the Law Council is drawn up and submitted to Parliament. Before being dealt with by the two Chambers the Bill is submitted to a Parliamentary Legal Committee, which gives its views on the proposal. As a rule, the Committee proposes that Parliament should adopt the draft. The matter is then taken up by both Chambers of Parliament. By letter addressed to the Ministry of Justice, Parliament then informs the government of the decision adopted, whereupon it is incumbent upon the Ministry to cause the requisite practical measures to be taken, such as having the Act printed and published[7] and, in the case under discussion, having regulations for the application of the Act promulgated.

One of the first problems of more general interest to the legislators when starting the revision was the question of whether the basic statute of Swedish public air law should be given the form of an act, or whether it should be issued administratively – in other words, whether it should be submitted to and adopted by Parliament by parliamentary decision, or whether it was sufficient that it should be issued by the Ministry of Communications. The current Decree on Air Navigation

[7] Publishing takes place in "Svensk Författningssamling (SFS)," an official Swedish publication containing new statutes and amendments to statutes in force.

of 1922 stands between these two extremes, since it was issued by the Ministry of Communications after consulting Parliament.

The Aviation Act is to contain regulations regarding the following important subjects, viz., the nationality of aircraft; rules concerning an aircraft register; safety regulations as to aeronautical material and the manning of aircraft; aircraft accident investigation procedure, and the related question of liability of the owner or aircraft commander for violation of safety rules; penalty rules, which, if compared to the present ones, have been made much more severe, etc. The importance of these subjects would indicate that the basic principles — or at least part of them — should be in the form of an act. Other countries have not held to any uniform pattern. The present legislation of Finland, on the whole, adopts the same attitude as the Swedish Decree on Air Navigation. In Denmark and Norway, however, the corresponding statutes have the character of acts. In Switzerland the basic regulations are issued in the form of an act, while the details have been left to administrative regulations.[8] Germany, too, has divided her civil aviation laws into an act and administrative regulations.[9] In Swedish maritime law, the corresponding provisions have been given the form of acts. The circumstance that development of aviation is still proceeding extremely speedily, and that it must therefore be expected that the present regulations will have to be amended from time to time, is an argument against regulation by an act; it is, as a matter of fact, indispensable that the rules which are given the form of acts should be so stable that, at least for some time, they do not have to be modified. In this connection a further circumstance of particular importance is the work done by the International Civil Aviation Organization (ICAO) regarding International Standards and Recommended Practices, which finds expression in the Annexes to the Chicago Convention.

In the course of Scandinavian co-operation, these divergences of opinion were discussed in great detail. It was finally decided that the reasons in favor of regulating the basic prescriptions in the field of public air law by an act predominated. Sweden has, in this connection, aimed at including in her Aviation Act none but fixed general rules of essential importance which may be expected not to be affected by the continuing development of aviation; detailed regulations of a technical character, etc., will be included in the proclamation on the application of the Act to be published administratively, and in the regulations issued by the Board of Civil Aviation. It will be easier to adapt such a proclamation and such regulations to changed conditions. In Denmark and Norway basically the same system has been adopted.

---

[8] Bundesgesetz über die Luftfahrt vom 21. Dezember 1948, and Vollziehungsverordnung zum Luftfahrtgesetz vom 5. Juni 1950.

[9] Luftverkehrsgesetz vom 1. August 1922, and Verordnung über Luftverkehr vom 19. Juli 1930.

The above serves to show that, in the legislative sphere here discussed, the method applied is the one called frame-legislation. The Swedish Aviation Act is the basic statute containing rules of essential and basic importance and granting far-reaching powers to the Ministry. In the regulations for the application of the Act, published in the form of a Royal Proclamation, the Ministry will issue detailed specifications regarding the rules to be observed under the Act — some with explanatory material. From the text of the Swedish, Danish and Norwegian Draft Acts, it can be seen that provisions granting the Ministry such powers may be found in a great number of articles; in addition, a special article grants general powers in this respect. Finally, the Board of Civil Aviation or another authority appropriately empowered by the Aviation Act or by the proclamation on its application will issue regulations containing detailed instructions in questions regarding civil aviation—for instance, air traffic rules—which are based on the Annexes to the Chicago Convention.

As pointed out before, one of the most important tasks of the legislators has consisted in conforming Swedish air law to the Chicago Convention and its Annexes. The legislators have had, moreover, to consider still other international conventions in the field of air law. Special mention in this connection must be made of the Geneva Convention, which was ratified by Sweden in 1955 and, during the same year, incorporated in Swedish law by adopting special acts on registration and nationality of aircraft, salvage, and rights in aircraft.[10] In drafting these regulations the Act of 1901 regarding Rights in Sea-going Vessels was largely taken into consideration, naturally with the changes called for by the provisions of the Mortgage convention. Certain enactments connected with the recognition or rights in real estate have also served as a pattern.

The Convention for the Unification of Certain Rules relating to International Carriage by Air, signed at Warsaw on October 12, 1929, which was incorporated in the Swedish law by the Carriage by Air Act of March 5, 1937 (No. 73), has also been taken into consideration.[11] There was some discussion as to whether the Carriage by Air Act should be embodied in the Aviation Act or whether it would be more suitable only to refer therein to the Carriage by Air Act. The central importance to aviation of carriage by air may, on the one hand, in itself be regarded as a reason for embodying the Carriage by Air Act in the Aviation Act. On the other hand such an incorporation would, to a certain degree, mean a break in the system of the structure of the Aviation Act. Besides, the Carriage by Air Act may, within a comparatively near future, have to be revised in conformity with the Hague

[10] See following Acts of May 12, 1955, viz: No. 227 on the Recognition of Rights in Aircraft; No. 228 on the Registration of Aircraft and Salvage of Aircraft, etc.; and No. 229 on the adherence of Sweden to the Convention on the International Recognition of Rights in Aircraft of 1948.

[11] The Carriage by Air Act goes further than the Warsaw Convention in the respect that, on principle, the Act is applicable also to domestic air transport, and to transportation between Sweden and a non-Warsaw country.

Protocol of 1955. For these reasons, so far as Sweden is concerned, the Aviation Act contains no more than a reference to the Carriage by Air Act. Denmark and Finland have followed the same course, while Norway is embodying the Norwegian counterpart of the Carriage by Air Act in her Aviation Act.

Further, the legislators have had to consider the Convention for the Unification of Certain Rules relating to the Precautionary Attachment of Aircraft, signed in Rome on May 29, 1933, which was incorporated in Swedish legislation in 1939. The Aviation Act only contains a reference to the Swedish Act of 1939. Here, too, it has been debated whether this Act should be embodied in the Aviation Act. However, in view of the provisions of Art. 4 of this 1939 Act, which provide that it shall be applicable to foreign aircraft only in case the King, after agreeing to that effect with a foreign State, so decrees. It was considered that this provision would not be consistent with the general character and structure of the Aviation Act. In Denmark and Finland the same line has been followed, while Norway has embodied the provisions in question in her Aviation Act.

Finally, account has been taken of the Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface, opened for signature at Rome, October 7, 1952, and signed by Sweden in 1954, though not yet ratified. The corresponding provisions are included in the Swedish Act of May 26, 1922 (No. 382) on the Liability for Damage Caused by Aviation. Even in this instance, for reasons similar to those given above in relation to the Carriage by Air Act, the draftsmen have preferred to include no more than a reference in the Aviation Act. It should be pointed out that Denmark and Norway have used the same method.

Swedish, Danish, and Norwegian co-operation in the field of scheduled air services, i.e., in the activities of the consortium Scandinavian Airlines System (SAS), has not been without its effect on legislative work.[12] As an example of a provision stemming from such collaboration one may mention an article of the Swedish draft Aviation Act regarding the delegation of the inspection of aeronautical material to a special expert or authority.[13] The SAS co-operation will also considerably affect the detailed rules which will be contained in the regulations for the application of the Aviation Acts.

In the course of Scandinavian co-operation certain differences have arisen in the views held by Sweden, Denmark, and Finland, on the

[12] For detailed information regarding this consortium see Report on the Scandinavian Airlines System (SAS), ICAO Circular 30-AT/5, 1953; R. A. Nelson, "Scandinavian Airlines System Co-operation in the Air," JOURNAL OF AIR LAW AND COMMERCE 1953, p. 178 et seq; and P. Burguet, "Les Relations entre les Etats Scandinaves (Danemark, Norvège, Suède) et le Scandinavian Airlines System," Revue générale de l'Air 1956, p. 126 et seq.

[13] Art. 2 Ch. 3, has the following wording: "In order to have its air-worthiness established an aircraft shall undergo inspection at the times and in the manner prescribed by the King or, by authorization from the King, by the Board of Civil Aviation, and even otherwise be subject to supervision by the Board. If prescribed by the King, the Board may charge a special expert or authority with assisting it in or with carrying out the duties envisaged in para. 1."

one hand, and Norway, on the other regarding the principles to be applied in the regulation of aircraft registration and recording rights in aircraft. These differences have become apparent in the Aviation Acts drafted in the respective countries. According to the Swedish, Danish, and Finnish draft Acts there are to be two registers. one related to matters of Public Law, which is kept by the Civil Aviation Authority (the Aircraft Register), and one related to matters of Private Law, kept — as regards Sweden — by the Division of the Lower Public Court of Stockholm which deals with matters regarding the recording of rights in aircraft (the Aircraft Record). The Norwegian draft, on the other hand, looks toward the maintenance of its present arrangement, a joint register, to be managed by the administrative authority.[14]

Accordingly, the Swedish Aviation Act contains the provision that the Board of Civil Aviation shall keep an aircraft register, and that special regulations will deal with the recording of rights in aircraft, which is a matter of Private Law. As a matter of fact, this procedure corresponds to the one adopted when the act dealing with mortgages on ships was drawn up.

Detailed provisions regarding the Aircraft Register and its contents, the form of application to be made for the registration of aircraft, the notification of change in the title to an aircraft, etc., will be found in a Proclamation issued administratively.[15]

The Swedish Aviation Act furthermore contains a provision, that all physical and juridical persons of Swedish nationality — but not non-nationals — shall be entitled to own aircraft in Sweden and to have them registered as of right. The policy behind this rule is the one that lies behind many provisions of other Swedish Acts, which, on principle, forbids foreigners to acquire legal title to real estate in Sweden, to work there, etc. It has been questioned whether special guarantees should not be created to prevent a corporation, nominally Swedish but in reality owned by foreign nationals in whole or in part, from being entered on or remaining on the register. It was considered, however, that the question lacks practical importance since no one may engage in scheduled air transport or other commercial aviation activities without a special permit, in the granting of which the Board inquires into the question of nationality.[16]

Besides, the Swedish draft Aviation Act creates a possibility for the registering even of an aircraft owned by a foreign individual or

---

[14] See Government Bill No. 13 submitted to the Swedish Parliament in 1955 as regards the adoption of a Convention on International Recognition of Rights in Aircraft, and submitting the draft of an Act on the Recognition of Rights in Aircraft, etc., pp. 294 et seq.

[15] Royal Proclamation of December 2, 1955 (No. 635) on Detailed Regulations regarding the Aircraft Register, etc., which entered into force on February 1, 1956.

[16] See Articles 8 and 79 of the Swedish Stock Corporation Act of September 14, 1944; the latter article decrees that "the members of the board and the managing director shall be of age and legally competent and, except where in a special case the King permits otherwise, they shall be Swedish nationals domiciled in Sweden. Such sanction may not be obtained for more than one-third of the total number of the board members."

corporation. By introducing this stipulation, certainly novel in relation to current legislation, Sweden has relaxed the strict rule prohibiting the registration of aircraft in the name of non-nationals. Equivalent provisions may be found in the Danish, Finnish, and Norwegian draft Acts.[17] As an absolute premise for the registration of aircraft owned by foreign nationals it is, however, in so far as Sweden, Denmark, and Finland are concerned, provided in the articles in question that its provisions cover only those aircraft which, as a rule, are operated from a point of departure within the country where the foreign owner is located.

It has been regarded as self-evident that, when the question arises whether such a dispensation should be granted, the domicile of the owner or, in the case of corporations, the seat of the Board or Head Office will be taken into account. In the Norwegian draft Act there is no condition regarding point of departure.

The introduction of this arrangement covers a long-felt want. The situation which allowed a foreign national domiciled in Sweden and who owns an aeroplane used exclusively or principally for flights within Sweden to have his aeroplane entered on the register of his native country only, but not on the Swedish Aircraft Register, was certainly far from satisfactory. From the point of view of the Board of Civil Aviation, which has to keep watch over flight safety, it is an additional advantage that the supervision of the airworthiness of the aircraft and such other checking as is required be carried out by a Swedish authority, which is the case where aircraft registered in Sweden are concerned.

In the course of the Scandinavian deliberations regarding the penalty rules of the Aviation Acts, the question arose whether a detailed catalogue of all the punishable offenses should be made, or whether it would be sufficient to limit oneself to one or several articles on penalty rules in general. Norway has chosen the former alternative — the chapter on penalties of the Norwegian draft Aviation Act consists of 34 articles — while Denmark has followed the opposite line, including no more than 2 articles in its chapter on penalties. Sweden and Finland have chosen a middle course by specifying the offenses for which imprisonment or hard labor instead of a fine may be imposed (8 articles), and then summarizing all other offenses, where no more than a fine may be imposed, in a general article.

Another question which was dealt with at length in the course of the Inter-Scandinavian co-operation was that of the legal status of the aircraft commander. It was agreed that all the national Aviation Acts

[17] Most States still restrict registration of aircraft to their own nationals. There are, however, certain exceptions, viz.: Australia, El Salvador, Iran, and Nicaragua place no limitations on the right to register from the point of view of nationality; Argentina, Bolivia, Cuba, Panama, and Uruguay allow registration by a person who is merely domiciled in the State, irrespective of nationality; Colombia, Greece, India, the Netherlands, Switzerland, the Union of South Africa, and Venezuela do provide in certain circumstances for registration by a non-national.

should contain a special chapter on the aircraft commander. The problem was discussed on the basis of a draft convention on the subject,[18] and of the relevant chapter of the Maritime Code. From a realistic and systematic point of view it would appear fully correct that all the rules referring to the privileges and duties of the aircraft commander which bear relation to Public Law, such as those defining the order and conduct to be observed on board aircraft, the disciplinary authority exercised by the commander, his obligation to see to it that log books are kept, etc., should be set out in a special chapter of the Aviation Acts. It has not however, been possible to adhere strictly to such a plan, since no clear distinction between the elements of Private and Public Law in respect of the functions of the commander can be made. This is apparent, inter alia, from the text of the Draft Convention of 1947 on the Legal Status of the Aircraft Commander, which deals with questions of both Public and Private Law.

In his thesis on the legal status of the master of a sea-going vessel, the Finnish Judge Rudolf Beckman also states that, in a ship, the exercise of command comprises elements of both Public and Private Law, and that, since those functions of the master that recur most frequently are, according to their nature, specifically related to Public Law, he – Beckman – agrees with the German legal expert H. Wüstendörfer that, in this respect, the elements of Public Law predominate.[19] It should be added that the legislators, in view of the uncertainty of the international situation, have limited themselves to only the most important practical questions connected with the commander. For this reason a subject which, in maritime law, is of such importance and has been so widely discussed, i.e., the legal power of the commander, has not be dealt with in the Aviation Acts. It has been considered that, in aviation law, regulation is not so indispensable as it is in maritime law, because the structure of air transport differs so essentially from that of maritime transport. However, the need for regulations in this connection should not be underestimated.[20] The legal power of the commander is, besides, recognized by the national

---

[18] In 1931 CITEJA presented a proposal for a Draft Convention on the Legal Status of the Aircraft Commander (Avantprojet de Convention sur la Situation Juridique du Commandant de l'Aéronef). Subseqently, the subject was dealt with by CITEJA both before and after the recent World War. At the CITEJA meeting held at Cairo in November 1946—by which time, pursuant to the Interim Agreement on International Civil Aviation concluded in Chicago, CINA had been replaced by the Provisional International Civil Aviation Organization (PICAO)—it was decided, inter alia, to submit to PICAO the draft of a Convention on the Legal Status of the Aircraft Commander. This draft was studied and to some extent revised by a special Legal Committee instituted by PICAO. The Legal Committee of ICAO then elaborated the Draft Convention on the Legal Status of the Aircraft Commander, as revised by the Paris Legal ad hoc Committee, February, 1947.

[19] See R. Beckman, Om fartygsbefälhavarens rättsliga ställning, Vol. 1, Abo 1936, p. 101.

[20] See K. Grönfors, Om trafikskadeansvar, Stockholm 1952, pp. 360-361. See also M. S. Kamminga, The Aircraft commander in commercial air transportation, s Gravenhage 1953, p. 140 et seq., as well as H. Beaubois, "Le Statut juridique du Commandant d'aeronef," Revue française de droit aérien 1955, p. 248 et seq.

legislations of France (Act of May 25, 1936), Italy (Act of February 8, 1934), and Uruguay (Decree of December 3, 1922), etc.[21] As indicated above it has nevertheless appeared preferable to watch developments while the work on the Draft Convention on the Legal Status of the Aircraft Commander is in progress.

In this connection it may be mentioned that the desirability of a definition of "aircraft commander" contained in the national Aviation Acts has been discussed. It was, however, decided that, pending the adoption of a distinct international definition, one should restrict oneself to the regulations set out in the Draft Acts, that there shall be a commander, and that he shall exercise the highest authority on board the aircraft. In our opinion it must from the point of view of Continental Law be regarded as hazardous to give definitions of any general concept in the brief text of an act. Experience has shown that the wording of a definition often leaves room for critical comments, the definition either being too narrow in scope, so that it fails to embrace all that should actually be included in it, or too wide, so that its applicability exceeds the envisaged scope. For those reasons an ample and detailed explanation of a term aiming at a clear interpretation seems preferable to a brief definition.[22]

The wording of the Draft Acts as stated above thus implies that there shall be a commander in every Swedish, Danish or Norwegian aircraft irrespective of its size. This question was discussed by CITEJA in connection with the drafting of Art. 1 of the draft convention of 1931.[23] It was agreed then that, as regards international air transport, a person having "les pouvoirs d'autorité et de discipline" must always be present on board an aircraft. It was also agreed that, in this connection, a distinction between large and small aircraft should not be made, and that the presence of a commander should be made an absolute rule as soon as aircraft were engaged in the international transport of passengers or goods. While the text of the Swedish, Danish and Norwegian Aviation Acts were in preparation, it was proposed that the prescriptions regarding the presence of a commander should only be made compulsory if there were more than one pilot on board an aircraft. This proposal was not, however, accepted. Neither was it considered suitable to limit this requirement to aircraft used for commercial air transport. Consequently, the respective national regulations regarding the commander will be applicable to any person operating an aircraft.

The provisions in question also establish that the commander exercises the highest authority on board the aircraft, which is fairly

[21] See ICAO Legal Committee, Minutes and Documents, 7th Session, DOC 7157-LC 130, p. 325.

[22] Cf. the critical comments as to the activity of ICAO in order to work out general definitions, made by K. Grönfors, "Några anmärkningar rörande charterbegreppet i lufträtten," Verkehrs-wissenschaftliche Veröffentlichungen, Heft 32, Beiträge zum internationalen Luftrecht, Festschrift zu Ehren von Prof. Dr. Jur. Alex Meyer, Düsseldorf 1954, pp. 57-58.

[23] See supra footnote 18.

self-evident; it has nevertheless been considered suitable to be explicit here. This provision corresponds to those prevailing in maritime law,[24] which stipulate that the master's authority embraces control over and supervision of the vessel and cargo as well as power over all persons on board, adding that this authority not only is a privilege enjoyed by the master, but also a duty incumbent upon him.[25] A corresponding prescription may also be found in certain foreign aviation laws, for instance, in the French Act of March 25, 1936 (Art. 8).

The safety of traffic demands, unconditionally, that the physical and mental condition of all those who serve on board aircraft shall be such that they are able to carry out their duties in a way to ensure full safety. Internationally, the relevant provisions may be found in Annex 2 to the Chicago Convention, Rules of the Air, where para. 2.5 stipulates that "no person shall pilot an aircraft, or act as a flight-crew member of an aircraft, while under the influence of intoxicating liquor or any narcotic or drug, by reason of which his capacity so to act is impaired." The Swedish Decree of 1951 on Road Traffic contains a corresponding provision as regards the drivers of motor cars and other motor vehicles.[26] This question has also been dealt with by special delegates working for co-operation in establishing uniform Scandinavian rules as regards temperance in traffic.[27] Scandinavian medical experts have dealt with the problem in great detail and have undertaken several investigations on the effects of alcohol and fatigue. The problem has also been dealt with during negotiations between an association of pilots and other persons in the service of air carriers and the Scandinavian Airlines System (SAS), and regulations on the subject are included both in the collective agreement to which this association and SAS are parties, and in the Service Rules which SAS have issued for their flying personnel. It may be expected that certain instructions on the subject will be included in the regulations for the application of the national Aviation Acts.

The modification of the principal statutes of public air law, which will be concluded by the adoption of the Swedish Aviation Act and of the proclamation on its application, is only to be regarded as a link in the work of revision in the sphere of air law which is being carried on in Sweden and the other Scandinavian States. The scope of this revision depends, naturally, on the work which will be done by the Legal Committee of ICAO and other international bodies interested in the study of air law.

---

[24] Cf. Art. 14 as the Swedish Seamens Act of June 15, 1922.

[25] This is also the case in the Soviet Maritime Code, although the commander is considered to be a member of the crew. See H. Wikander, "Den nya sovjetryska sjölagen," Svensk Juristtidning 1930, p. 489 et seq.

[26] Para. 1 of Art. 28 is worded as follows: "No one who, owing to illness, fatigue, or the effect of spirituous liquor or other stimulants or narcotics, or for some other reason, fails to meet the necessary requirements for conducting a vehicle in a manner ensuring safety shall be allowed to drive a vehicle on the road."

[27] 1949 ärs trafiknykterhetsutredning (Committee of 1949 of investigation of temperance in traffic).

SOME ASPECTS OF THE NEW CIVIL AERONAUTICS LAW OF JAPAN

By Dr. Ichiro Narahashi

Representative of Japan on the ICAO Council

UPON termination of the War, all aeronautical activities in Japan were banned by the directives and memoranda of the Supreme Commander for the Allied Powers (SCAP). Later, in accordance with the SCAP memorandum issued June 1950, only "traffic and sales" activities in domestic air transportation were approved.

In September 1951 the Japanese Peace Treaty was signed at San Francisco, in which no restriction on any kind of aeronautical activities was prescribed. Much was, therefore, expected in the way of rapid development of Japanese civil aviation when this Treaty came into effect.

At that time, however, the former Japanese Civil Aeronautics Law and Regulation, which were enacted in 1921,[1] had already been abolished, and three post-war Cabinet Orders had put the following into operation on a temporary basis:

1. "Cabinet Order Concerning Domestic Air Transportation" stipulated that the operation of aircraft on the one hand and "traffic and sales" activities on the other in domestic air transportation should be performed by a foreign airline and a Japanese company, respectively.

2. "Cabinet Order Concerning Foreign International Air Transportation" laid down procedures for application by foreign airlines for permission to engage in international air transportation to and from Japan.

3. "Cabinet Order Concerning the Entry, Exit, etc., of Aircraft" laid down procedures relating to the admission to and departure from Japan of aircraft other than those engaged in scheduled international air transportation.

It was obvious that these temporary Orders were neither sufficient nor satisfactory as civil aeronautics law and regulation for all civil aviation activities in the peace-restored period, and had to be amended or replaced by new and permanent rules drawn up to cover existing circumstances.

Furthermore, Article 13, Paragraph C, of the Peace Treaty, states that Japan shall put into effect the principles and provisions of the Convention on International Civil Aviation, signed at Chicago on December 7, 1944, as well as the international standards, recommended

[1] The Law on Air Navigation of 8 April 1921 (64 articles) dealt with Registration, Licensing of personnel, Aerodromes, Air navigation and transport, Penalties. A French translation of the text appeared in the *Revue juridique de la locomotion aérienne*, Vol. 9 (1925), pp. 238-250.

practices and procedures adopted as Annexes to the said Convention. Japan was consequently obliged to enact a new air law and regulations consistent with the provisions of the Chicago Convention, even prior to participating in the said Convention. (Japan adhered to the Chicago Convention in October 1953.)

A committee was appointed in 1951 in the Civil Aviation Bureau, Ministry of Transportation, for the purpose of drafting a new law and regulations, which became effective in July 1952.

In drafting the new law and regulations there appeared to exist two distinct opinions on the part of the Committee. One viewpoint was that the new air law should be a completely new compilation, regardless of the form and contents of the old one, be as simple as possible, but with the power of the Director of Civil Aviation increased. The other group on the Committee was not so radical, but contended that the new air law should follow the form of the former one, and only in its content should there be a change in order to reflect the Chicago Convention and the Annexes thereto. The opinion of the first group was based on the thought that after the new law had been drafted in full detail and approved by the Diet, it would be too cumbersome for the Government to have to present continuously to the Diet for approval amendments necessary to meet the changing requirements of the rapidly progressing international civil aviation.

After due consultation with the Legislative Bureau of the Prime Minister's Office, the Committee decided to adopt the opinion of the second group for the reason that all matters affecting the rights and obligations of the people should be fully provided for in the law, and any extreme means, which would be alien to the form or system of Japanese laws, should not be considered at that time.

Under these circumstances the current Japanese Civil Aeronautics Law and Regulations were drawn up and enacted in July 1952;[2] and, as will be seen, great emphasis was placed on establishing standards for aircraft airworthiness, qualifications of pilots and other airmen, standards for the construction, installation and maintenance of airports and air navigation facilities, and standards for the operation of aircraft in addition to provisions assuring the orderly development of both domestic and international air transportation, all in conformity with the provisions of the Chicago Convention.[3]

---

[2] The Civil Aeronautics Law (No. 231) of 15 July 1952, as amended by laws no. 278 of 1952, no. 66 and 151 of 1953, no. 60 of 1954, is divided in ten Chapters (162 articles) as follows: I. General provisions; II. Registration of aircraft; III. Safety of aircraft (airworthiness, etc.); IV. Airman (licensing); V. Airway, Aerodrome and Air Navigation; VI. Operation of Aircraft; VII. Air Transportation, etc.; VIII. Foreign aircraft; IX. Miscellaneous (Investigation of accidents, fees, etc.); X. Penal provisions. The law has been completed by a Civil Aeronautics Regulation, effective the same date as the law and amended thereafter from time to time.

[3] Article 1 of the law defines its purpose as follows: "*Article 1.* The purpose of this law is to promote the development of civil aviation by providing for methods of securing the safety of navigation of aircraft in conformity with the provisions of the Convention on International Civil Aviation and with the standards, practices and procedures adopted as annexes thereto, and by establishing order of enterprises carried on by operating aircraft."

AIRPORT DEVELOPMENT AND OPERATION PROBLEMS

A Comparative Study of Five Medium Size Cities

By Richard Nelson

Assistant Professor, School of Business, Northwestern University; Ph.D., University of Texas. Associated with Pioneer Airlines (later Continental Airlines), 1951-56.

We are buying airplanes that haven't yet been fully designed with millions of dollars we don't have—and we are going to operate them off airports that are too small in an air traffic system that is too slow—and we must fill them with more passengers than we have ever carried before.[1]

THE impact of the jet age on major metropolitan airports has been the object of much discussion and study.[2] Most of the investigation has revolved around the problems related to landing and take-off requirements, noise problems, fueling facilities, and terminal requirements of the 118 passenger jets which will begin scheduled operations within the next two years. However, not all the problems lie with these major terminals. As the domestic air network has developed, an increasing number of medium-size cities in the United States have been faced with the problems which attend the development and operation of a municipal airport. As traffic increases and as larger aircraft are moved down to shorter stage service to integrate jet long haul service, a substantial burden of expansion is placed upon the airports of class III and IV.

TABLE 1
FEDERAL AID PROGRAM
1947-55

Class of Airport	*Number*	*Federal Aid*
I	240	$ 3,928,000
II	270	13,035,000
III	339	31,240,000
IV	224	50,005,000
V	78	45,537,000
VI and over	54	87,604,000

Source: CAA, Statistical Handbook of Civil Aviation, 1956.

These Class III and IV airports are classed on the basis of runway lengths of from 3,500 to 5,500 feet although the pace of technological advance of aircraft presses constantly upon communities operating such airports to increase runway length and strength. These 562 airports have accounted for over $80 million in federal aid in the period

[1] *Aviation Age*, Mar. 1956, Speech by Robert Aldrich.
[2] For example see *23 Journal of Air Law and Commerce No. 1.* The bulk of this issue was devoted to airport problems of the major terminals in the jet age.

1947-1955. Although the problems of these individual airports are not of the magnitude represented at the major terminals, they are nevertheless an important part of community activity at such cities.

The writer had the opportunity to visit and study five municipal airports at medium-size cities. They were not "typical" airports, rather they were chosen on the basis of their history of development and their characteristics to illustrate various conditions and problems which attend the construction and operation of a municipal airport of this type. At each of the airports included in the study the history of airport development was traced and the costs of construction, where available, were compiled. The expenses and revenues of each facility were examined and related to the various airport functions. Passenger and aircraft traffic burdens at the airports were reviewed and, finally, the organization structure for management of each of the operations was studied to gain insight into the function of executive leadership for municipal airport operation.

In 1946, a Harvard study of airport problems provided a basis for inquiry by pointing out some questions which remain unanswered today for many municipal airports. They include: By what standards can inadequacies in present practices be determined and corrected? Should airport services continue to be provided at public expense? If airport users are to pay for their privileges, how much and on what basis should they be charged? Can airports be made self-supporting without placing an undue burden on aviation?[3] Some of the problems cited by the Bollinger Report were (1) poor cost control, (2) no soundly conceived long range financial plans, and (3) no generally accepted cost allocation to the various airport users.

These questions and problems were related to the cities included in this study to determine the extent to which they have been answered or solved.

Airport of City "A"

City A saw the introduction of aviation when a dirt landing area was cleared near town as a practice field for Army Air Corps flyers in 1917. During the early 1920's several private flying fields were established near the community with a rapid turnover of operators who tried, unsuccessfully, to capitalize on the new art of flying. By 1928, the community recognized that air transport was to be an important part of community activity which could not be operated under conventional private business enterprise methods. The "sunken" capital investment was high, the demand erratic, and the operating costs high. Initial interest resulted in a bond issue election to authorize $75,000 for establishing a municipal airport.

The new facility was dedicated in October 1930 and consisted of 300 acres purchased at a cost of $62,000 with the balance of the funds

[3] Lynn L. Bollinger, Alan Passen, and Robert E. McElfresh, *Terminal Airport Financing and Management*, (Andover: The Andover Press, 1946), p. 4 (This study will hereafter be referred to as the Bollinger Report.)

spent to develop a 1,000 foot gravel runway, a terminal building, and fueling facilities. Either by lack of interest, or by failure of air transport to realize the optimistic predictions of its development, no major work was accomplished until during World War II. During the war the Corps of Engineers spent about $350,000 for improvement of ramps and runways.

The next major indication of interest by the city in airport improvements resulted in a November 1950 bond election which proposed airport bonds in the amount of $350,000. There were notes of dissent as evidenced by paid advertisements asking "How can the building of a new air depot *for the benefit of the airlines* be classed as a need of the taxpayer?" The Citizens Advisory Committee was vocal in support of the bonds and bemoaned "Our gateway to the air traveler . . . how red are our faces . . . if we put up half the cost of replacing this disgrace with a modern air terminal, Uncle Sam will pay the rest." The federal aid program was curtailed through 1954 and, although the airport bonds passed by a slim margin, the same terminal building remains in 1957 as the city's gateway to the air traveler. The amount authorized has been spent on runway and small aircraft hangar improvements in an attempt to keep pace with the advance of air transport technology. The field's runways are the least adequate of the cities in this study, with three major runways ranging in length from 3,195 to 4,612 feet. Additional facilities include two large wooden hangars used by fixed base operators, three "T" hangars for small aircraft shelter, and an obsolete control tower which must be abandoned in wind conditions exceeding 40 knots per hour.

With reactivation of the federal aid program, the city again came to the people seeking authority to issue $1,200,000 in airport bonds. This amount plus funds remaining from the 1950 bond issue will make up the city's share of $1,356,000 of a total estimated cost of $2,743,472. Only $500,000 is designated for terminal building improvements with the balance for land acquisition, runway and lighting improvements. Table 2 indicates the division of estimated capital costs of the airport, including currently authorized projects between municipal and federal funds.

TABLE 2
ESTIMATED CAPITAL INVESTMENT
AIRPORT A

Municipal Bond Issue Funds		
1928-Current Authorizations		$1,827,741
Federal Aid		
WPA Project (1937)	$ 37,202	
Wartime Expenditures	356,000	
Current Matching Funds	1,387,472	
Total		1,780,674
Total estimated investment including currently authorized projects		3,608,415

The contribution of local and federal funds has been approximately equal. With current operating revenues of between $70,000 and $80,000 per year the capital turnover is exceedingly low.

Operating Revenues and Expenses

Table 3 is a consolidated operating statement for the years 1952 through 1955. The items bear some explanation. The city has an agreement with its exclusive fuel supplier that 3 cents per gallon "field rental" is to be "paid" to the city for each gallon of fuel pumped by city operated fueling facilities. Some fuel is pumped by fixed base operators for which the operator pays the city 3 cents per gallon and the fuel supplier pays the city an additional 3 cents per gallon. Attempting to trace these payments is somewhat confusing since the amount paid by the supplier (this is actually a price discount) is added to Gas and Oil Sales, while the amount paid by the fixed base operator is added to Concessions revenue. In addition, a part of the income from

TABLE 3
AIRPORT OPERATING STATEMENTS 1952-55
CITY A

	Fiscal 1955	*Fiscal* 1954*	*Calendar* 1953*	*Calendar 1952*
Operating Revenue				
Gas and Oil Sales	$ 90,188	$ 89,945	$ 85,961	$ 82,126
Less C.O.G.S.†	58,145	60,767	58,286	55,023
Gross Profit	32,043	29,178	27,674	27,103
Other Revenue				
Rental Hangars & Stg.	18,068	16,951	15,431	15,601
Landing Fees	12,805	12,360	10,455	9,119
Rental Adm. Bldg.	7,748	6,447	5,499	3,313
CAA Rent	4	305	313	319
Concessions	4,385	3,958	3,847	3,329
Total Other Revenue	43,009	40,021	35,545	31,681
Total Operating Revenue	75,052	69,199	63,220	58,784
Operating Expenses				
Salaries and Wages	26,390	26,815	25,494	22,418
Other Services	3,295	5,122	5,053	4,791
Materials & Supplies	421	638	678	628
Fixed Charges	451	446	446	446
Maintenance	17,112	18,545	16,148	8,686
Total Operating Exp.	47,670	51,565	47,818	36,964
Net Operating Income	27,382	17,634	15,402	21,820
Gas Sales (gallons)	211,532	216,477	210,911	204,770
Oil Sales (gallons)	990	1,237	955	755

* There is a three month overlap of Fiscal 1954 and Calendar 1953 because of change in accounting system. This is to keep twelve months in each period for comparison.

† Cost of goods sold.

the airport restaurant is added to Rental Administration Building and part to Concessions. The operating expenses are designated by type and present no obvious basis for functional allocation. In order to determine the net revenue accruing to each of the airport functions a detailed analysis of the source of income and the nature of expense was necessary. For example, the bulk of the Salaries and Wages account was to the benefit of the city Gas and Oil Business, and when this is charged against the Gross Profit of that operation it is clear that the net revenues to the city would have been increased had fueling operations been franchised to private operators.

Rentals at the airport appear to have been individually negotiated without uniform application to tenants. For example, the airline office rentals for the three airlines serving the city vary from $2.65 per square foot annually to $4.17 (the latter, incidentally, is charged for the last occupied and least desirable space). The coffee shop pays 5 per cent of gross sales on food items and 10 per cent on non-food items. Rent-car operators are charged $150 per month for approximately 40 square feet of space, amounting for one of the operators to over 50 per cent of his gross sales at the airport.

Landing Fees are of the sliding scale type with no provision for a weight adjustment, as follows:

First daily schedule	$100 per month
Second daily schedule	75
Third daily schedule	50
Each additional schedule	25

Thus there is a drastic reduction in average fees for any one carrier as the number of daily schedules increases. A weak carrier operating

TABLE 4

CITY A

ESTIMATED ALLOCATION OF INCOME AND EXPENSES BY FUNCTION

Landing Area			
Income			
Landing Fees	$12,805		
Gulf Field Rent	6,346		
Ragsdale Field Rent	2,266		
CAA Rent	4		
Gross Margin Gas and Oil	25,697	$47,117	
Expenses			
Personnel Services	$19,500		
Maintenance	13,777		
Other Services	1,090		
Materials and Supplies	141		
Fixed Charges	149	34,665	
			$12,452
Hangars			
Income			
Rentals (Hangars)	$ 9,480		
Storage	8,588	$18,068	

TABLE 4 (Continued)

Expenses			
Maintenance	$ 1,500		
Other Services	1,099		
Materials and Supplies	141		
Fixed Charges	149	2,888	
			15,180
Terminal Building			
Income			
Rentals	$ 7,748		
Concessions	2,119	$ 9,867	
Expenses			
Passenger Services	$ 6,890		
Maintenance	1,840		
Other Services	1,010		
Materials and Supplies	141		
Fixed Charges	149	$10,118	(251)
OPERATING PROFIT			$27,382

smaller equipment and few schedules pays a much higher average landing fee than a stronger carrier operating larger aircraft and a greater number of schedules.

Government offices pay only nominal rent although they occupy about 23 per cent of the ground floor space in the terminal building. Hangar rentals derive about one-half from fixed base operator rentals for the two large hangars and one-half from city-operated "T" hangars and tie down services. Other income items are minor and the airport has no income from other sources (agricultural or industrial).

Table 4 indicates the estimated functional allocation of incomes and expenses with the Landing Area and Hangars showing substantial net income and the Terminal Building showing an estimated net loss of $251. This is surprising considering the traffic density of the field and the fact that the airport is bordered on three sides by residential districts which would be expected to increase concession and restaurant incomes.

Traffic

The three commercial airlines serving the city operate about 30 daily schedules which make up 17 per cent of the traffic movements. Military movements account for 10 per cent of the traffic and civil aircraft for 73 per cent of the total traffic movements reported by the CAA control tower.

The airlines enplaned 61,972 passengers for an average of 6.2 passengers enplaned per flight. Based on the "Survey of Buying Power" 1955 population estimate there were 336 passengers enplaned per thousand population.

Management

City A has a rather complex multi-level channel of authority and responsibility between its Airport Manager and the operating head of

the city administration, the City Manager. The airport executive reports to the Director of Parks and Cemeteries, who reports to the Director of Public Works, who reports to the City Manager. The Airport Manager is the lowest paid of any in this study with a salary scale of less than $5,000 per year.

These circumstances place formidable obstacles in the path of dynamic and aggressive airport administration and development. It seems clear that a direct chain of command and a capable airport executive will be a vital part of the future operation of this $3 million facility.

Summary

City A's airport is unique because of the obvious lack of interest by the city in development of an adequate air terminal in the public interest. Although the city has very favorable traffic characteristics and the people have repeatedly supported bond issues for improvement, this city has the least adequate facility of the municipalities included in this study. Currently authorized projects promise to provide adequate physical facilities but important administrative and policy changes will be required if the airport is to best serve the needs of air commerce and of the community.

Airport of City "B"

As in the case of City A, municipal interest in developing airport facilities began in 1928 when the first airport was built of grass runways. A small hangar was built in 1931 to house the frail craft of the day. The paved runways and taxi strips were an outgrowth of World War II when the federal government leased the airport at an annual rental of $1 for development as a military air base. It was returned to full city use in 1949.

Shortly after the close of the War, in December 1945, the people authorized $300,000 in General Obligation Bonds for airport improvements. A modern terminal building was completed in 1949 under 50-50 federal aid matching funds programs. The terminal was built at a cost of $514,000. The bulk of the remaining physical facilities were provided by the federal government during the War at no cost to the city. The fine landing area includes three major runways ranging in length from 6,477 to 6,502 feet.

Table 5
Capital Costs
City B

Source	*Amount*
Municipal Funds	$ 555,174
Federal Funds (non-military)	694,601
Federal Funds (military)	4,684,000
Total	$5,933,775

The municipal investment makes up less than one-tenth of total capital investment and less than one-half of the non-military investment. Using total incomes of the facility of $134,684 and a non-military investment of $1,249,775, the capital turnover was only .17 for 1955. Of course, if the military investment is considered the capital turn is infinitesimal.

Other physical facilities at the airport include 5 large hangars, 40 "T" hangars, and a number of military buildings which have been converted to airport or commercial use. In addition the field is located in the heart of an irrigated agricultural area and the airport administration has exploited this locational advantage by sharecropping with a local farmer who irrigates the acreage around the runways and dry-land farms the area between the runways.

Operating Revenues and Expenses

Airport B undoubtedly maintains the best accounting of operations of the airports included in this study. The problem of estimated allocation to airport functions by the researcher is not present. A cost accounting system allocates revenues and expenses to functions, i.e. Terminal Building, Landing Area, etc.

The airport has earned substantial profits and the administration proudly proclaims that the field is a "paying" airport, paying all operating expenses and capital costs. It should be noted in passing, however, that over one-half of the revenues of the facility derive from non-airport activities and that the city has borne only a small part of the capital costs. This is not to minimize the accomplishments of the administration in developing a "paying" airport—rather to emphasize

TABLE 6
OPERATING STATEMENTS
CITY B

	Fiscal 1955	*Fiscal 1954*	*Fiscal 1953*	*Fiscal 1952*
Landing Area				
Fees	$ 14,568	$ 13,977		
Gas (Comm.)	4,592	4,095		
Agric. (Dry Land)	1,248			
Total	20,408	18,072	$ 20,447	$19,315
Hangar Area				
Rentals	19,754	16,060	15,870	13,558
Terminal				
Airlines	2,951	2,198		
Concessions	7,656	5,865		
Management	5,394	4,585		
Misc.	2,079	170		
	18,081	12,818	13,668	13,078

TABLE 6 (Continued)

Indust. & Agric.				
Bldg. Rentals	34,786	37,842		
Land Rentals	18,488	22,007		
Agric. (Irrigated)	21,704	15,979		
Water Sales	1,428	1,530		
	76,405	77,359	72,911	51,794
Total Income	134,628	124,309	122,896	97,746
Expenses				
Landing Area	31,198	34,311		
Hangar	7,787	7,610		
Terminal	16,458	14,684		
Indust. & Agric.	22,461	20,789		
	77,905	77,394	72,588	71,962
PROFIT	56,743	46,915	50,308	25,784

that this has been accomplished largely by developing non-airport activities. Based on airport activities alone, an operating profit of something over $500 is certainly far short of covering capital costs.

Landing Area revenues derive mainly from dry land farming (between the runways), landing fees, and income from the gas and oil franchise held by fixed base operators. Farming income is based on a devision of from one-fourth to one-third of the proceeds of the operation paid by the farmer to the airport. Dry land farming between the runways is classed as Landing Area income and the irrigated farming around the runways is called Agricultural income. About 95 per cent of the landing fee payments are paid by the two commercial airlines serving the city. An unusual feature is the assessment of landing fees against military movements, although such income is relatively small. The current landing fee contract is of the sliding scale type with weight frequency adjustment. It is the intent of the administration to alter the scale of fees to a simple weight basis charging about 6 cents per thousand pounds of gross landing weight for each flight of the commercial airlines. The gas and oil franchise income resulted from payment of 2 cents per gallon pumped by fixed base operators amounting to about $4,500 per year.

Hangar incomes derive from rental of the city owned "T" hangars and from fixed base operator rentals of the large hangars based on an annual charge of 25 cents per square foot with the lessee paying insurance and utilities. The Industrial and Agricultural income comes from the irrigated farming operations, land and building rentals, and sale of water from airport wells. The farming income is based on the same per cent of proceeds agreement in effect for dry land farming. Non-aviation building rentals result from lease of surplus buildings remaining after the war and from new buildings built by the city or by lessees since 1949. Industrial tenants are encouraged to lease land

for building purposes. For tax purposes the tenant writes the building off over a minimum period with title passing to the city and the lessee having option to lease the building for an additional period equal to his ownership time.

Concession revenues make up the most important part of Terminal Building incomes with the Airport Cafe making the greatest contribution. The Cafe is charged 8 per cent of gross sales on food items and 7 per cent on non-food items, amounting in 1955 to $6,219.78. Airlines pay $3.50 per square foot annually which includes rent and building management. Federal government offices pay $1 per year plus a full share of the building management costs.

In this age of mechanical merchandisers one is surprised by the complete absence of the variety of vending machines which usually is seen in transportation terminals. This is a part of the airport policy which permits only air trip insurance machines to be installed in the lobby. The administration feels that the small amount of revenue produced by other machines does not justify the unsightly appearance or janitorial problems which they present.

Traffic

The 18 commercial airline flights per day through the facility make up about 11 per cent of the traffic movements. Military movements constitute 18 per cent and the civil movements about 71 per cent.

The "Survey of Buying Power" estimates the city's population as 129,000 and passenger boardings for the year 1955 were reported as 37,775, or about 270 passengers boarded per thousand population. The boardings by the airlines represented 5.3 passengers per flight.

Management

City B is unique among the airports studied in its organization for management of the airport. The city code clearly states that the Director of Aviation and his Airport Board are responsible directly to the city legislative group for airport matters. The Director is reportedly one of the highest paid airport administrators employed by medium size cities with a salary scale in excess of $10,000 per year. The Airport Board consists of three citizens who serve three year terms. By tradition they cannot succeed themselves nor can a citizen who has any direct financial interest in community aviation activities serve on the Board. The result has been a strong and independent airport administration free of most of the vested interest and political forces which so often are an integral part of airport activities.

The airport has its own fire department manned by airport personnel and operated with specialized aviation fire fighting equipment owned by the airport. The airport employs only one full time fireman. The remaining full time airport employees are trained fire fighters

and are given rent-free quarters at the airport in return for performing standby fire duty during the time when not engaged in regular airport duties. The Director of Aviation is furnished a two-way radio equipped auto complete with flashing red light and siren and the city code bestows upon this executive all of the powers of the Chief of Police on airport premises.

Summary

City B has aggressively developed its airport and the success of the enterprise enjoys mute testimony in the operating record of the facility. The airport is a fine and adequate field and, with the help of substantial non-airport income, has become a "paying" airport covering all costs including municipal capital costs. The field is well managed and its unique organization for management provides interesting comparison.

Airport of City "C"

Again, 1928 was the date which marked the beginning of community interest in developing a municipal airport. Because of the financial and operational difficulties experienced by the private flying field operator, City C sought authorization by the voters for the issuance of $95,000 in General Obligation Bonds for the purpose of purchasing the field and developing a municipal airport. The field remained until 1952 as the city's airport, but the longest runway was only 3,500 feet and technological progress spelled doom to its further operation. Introduction of postwar equipment by the commercial airline serving the city forced suspending operations at the field and moving to a military landing area over 10 miles away. The electorate in 1950 authorized $300,000 in bonds for construction of a new municipal field since highway and railroad location prevented expanding the old field.

The site for the new airport was selected just four miles from the city and thus City C presents for analysis a case where the airport has been constructed on virgin land since the war. The site selected comprised about 480 acres purchased at a cost of $128,600. The Bond Issue funds proved inadequate (supplemented by disposal of surplus property) and $125,000 in additional funds was procured through the issuance of Airport Warrants bearing 4 per cent interest.

The field has paved runways 4,000 and 5,400 feet in length constructed of 12-inch crushed stone base and 2-inch hot-mix asphaltic concrete surface. Service was inaugurated during December 1953. A "temporary" masonry terminal building complete with air conditioning serves the air travelers' needs. The three large hangars and control tower were moved from the old airport to make up the balance of the physical facilities.

TABLE 7
AIRPORT CAPITAL COSTS
CITY C

	Amounts	*Per Cent*
Landing Area		
Runways, Taxiways, Ramps	$ 752,301	
Lighting	59,965	
Land	128,600	
Total	940,866	82
Hangars		
30 T Hangars	72,056	
Moving 3 Large Hangars	71,536	
Total	143,592	12
Terminal Buildings		
Temporary Terminal	48,122	
Control Tower Move	8,973	
Architect	5,305	
Total	62,400	6
Total Capital Costs	1,146,858	100
Federal Air Share	495,247	43
City Share	651,611	57

The heavy capital investment demands of the Landing Area are clearly illustrated in this case. The sunken capital investment requirements in providing minimum facilities is exceedingly high. The city has shared over half of this expenditure under federal matching funds programs.

Operating Expenses and Revenues

As with City A, City C maintains no cost accounting system for the purpose of allocating airport revenues and expenses to the airport functions. In order to estimate the net incomes accruing to each of the airport functions it was necessary to allocate revenues and expenses on the basis of estimates, airport records, and interviews with city officials. In the case of expenses, the city accounting system records them as shown in the following table.

TABLE 8
OPERATION EXPENSES
CITY C MUNICIPAL AIRPORT

Type of Expense	*1955-56 (Budget)*	*1954-55*	*1953-54*
Salaries and Wages			
Management	$ 4,500	$ 4,200	$ 3,600
Clerk Hire	2,100		
Labor Operations	22,966	22,848	20,596
Extra Help	1,500	1,963	5,148
Total Salaries	31,066	29,011	29,345

TABLE 8 (Continued)

Supplies	2,953	2,336	3,399
Maint. of Structures	515	1,644	790
Maint. of Equipment	4,883	4,454	5,313
Misc. Services	6,660	6,728	7,681
Sundry	150	150	140
Total other expense	15,161	15,316	17,323
Total Operation Expenses	46,227	44,327	46,668

The relatively high amounts accruing to the Labor Operations account reflects the operation by the city of a Gas and Oil Business, and the bulk of it must be set off against the Gross Profit of that enterprise. The revenues are recorded by source and are more readily allocable than expenses because the source of the revenue identifies it with its functional classification.

TABLE 9

OPERATING REVENUES
CITY C MUNICIPAL AIRPORT

	Estimated 1955-56	*1954-55*	*1953-54*
Gross Profit	$25,000	$24,556	$16,268
Landing Fees	5,650	5,597	3,754
Gasoline Storage Tank	600	600	525
Airport Pasture	100	100	191
Airport Cafe	360	180	
Weather Bureau Bldg.	899	899	756
Terminal Building	1,826	1,826	1,729
Pioneer Electric Serv.			150
Airport			53
Large Hangar	2,900	2,891	3,096
"T" Hangars	5,500	5,704	3,620
CAA and Tower	909	909	752
2 Small Hangars	2,300	2,529	949
CAL Hangar Space	45	45	
Tye Airport Storage			38
Airport Maps and Misc.		8	3
Airport Gas Tax Refund	600	392	644
Telephone Booth	300	300	300
Tel. Coin Station	140	146	134
Vending Machines	160	159	134
Other Revenues			1
Locker Rent	5	5	
Total	$47,199	$46,846	$33,095

Aside from the Gross Profit from the Gas and Oil Business, the largest source of income is from landing fees. The landing fees are based on a combination sliding scale and weight-frequency adjustment. With only one carrier serving the city there is no problem of equity in setting landing fees.

TABLE 10
LANDING FEES—CITY C

For the first 12 daily schedules (up to 27,000 pounds gross wt.)	$40 per schedule
Additional daily schedules	$25 per schedule
Charge per flight for unscheduled operations	$1 each
Additional charge per schedule per month for each 1,000 lbs. gross wt. in excess of 27,000	$1 per schedule

Airline office space at $152 per month and rent-car agents at $40 per month each provide the bulk of the terminal building income. The airport coffee shop pays only nominal rent and, in fact, the city was forced to subsidize this operation at one time to keep it in operation. Federal government office rentals reflect building management expenses. The other important revenues derive from the city operated "T" hangars and rentals paid by fixed base operators for the three large hangars.

The income statement with allocations to the various airport functions gives insight into the net revenue position of each of the functions. An item included in the functional income statement which does not appear in the expense and revenue statements of the city is $800 estimated expenditure by the street department for work done at the airport. The Hangar function makes the best showing, the Landing Area turned a smaller profit and the Terminal Building incurred a substantial loss in its operation.

TABLE 11
OPERATING STATEMENT
CITY C MUNICIPAL AIRPORT
FISCAL 1955

Landing Area		
Revenues		
Gross Margin (Gasoline)	$24,556	
Landing Fees	5,597	
Storage Tank Rental	600	
Airport Pasture	100	
Gas Tax Refund	392	
Total Revenues		$31,245
Expenses		
Labor Operations	20,688	
Extra Help	981	
Supplies	778	
Maintenance—Equipment	1,484	
Misc. Services	2,242	
Sundry	50	
Total Expenses	26,223	
Estimated Street Dept. Exp.	800	27,023

TABLE 11 (Continued)

Landing Area Net Revenue			$4,222
Hangars			
Revenues			
CAL Hangar Space	45		
Large Hangar	2,891		
"T" Hangars	5,704		
Two Small Hangars	2,529		
Total Revenues		11,169	
Expenses			
Maintenance—Structures	548		
Maintenance—Equipment	1,485		
Misc. Services	2,243		
Sundry	50		
Total Expenses		4,326	
Hangars Net Revenue			6,843
Terminal Building			
Revenues			
Airport Cafe	180		
Weather Bureau	899		
Terminal Space Rentals	1,826		
CAA and Tower Rent	909		
Misc.	8		
Telephone Booth	300		
Telephone Coin Stations	146		
Vending Machines	159		
Locker Rent	5		
Total Revenues		4,432	
Expenses			
Airport Management	4,200		
Custodian	2,160		
Extra Help	982		
Supplies	1,558		
Maintenance—Structures	1,096		
Maintenance—Equipment	1,485		
Misc. Services	2,243		
Sundry	50		
Total Expenses		13,774	
Terminal Building Net Revenue			(9,342)
NET OPERATING PROFIT			$1,723

Allocations of expenses are estimates based on discussions with the Airport Manager and are at best only estimates since no cost accounting records of this type are maintained.

Traffic

City C was the smallest of the cities studied with the "Survey of Buying Power" estimating the 1956 population of the community at 62,000. There were 17,221 passengers boarded by the commercial airline serving the city in 1955 amounting to an average of 3.4 passengers per flight. The passenger boardings represented about 278 enplaned passengers per thousand population.

The commercial airline traffic represented about 18 per cent of the traffic movements, military movements 11 per cent, and civil aircraft movements 71 per cent.

Management

The organization structure of City C is of the City Manager type with all major department heads reporting directly to this officer. The airport makes up one of these departments and the Airport Manager is directly subordinate to the City Manager. Because of this, a close liaison exists between the airport administration and top city administration. Airport matters receive high level consideration through direct lines of authority and responsibility.

Summary

City C represents a good example of a medium size city which has built its municipal airport on virgin land within recent years. It provides a striking example of the magnitude of the capital requirements necessary to provide even minimum facilities for commercial airline service. The airport has an exceedingly "good press" and apparently has wholehearted community support and pride in its operation. The people have asked only that it pay its way in terms of operating expenses—an objective which has been accomplished after only three years of operation.

Some questions arise, however, which will be examined in the conclusions. These include the city operation of gas and oil businesses and the accounting practices of the airport.

AIRPORT OF CITY "D"

Unlike the preceding cities, City D did not become interested in public financing of an airport until 1941. At that time the citizens voted $100,000 in General Obligation Bonds to "give the city a landing field that will compare with any in the state." A site was selected and 528 acres were purchased at $85 per acre. Of course, events later in 1941 intensified military air base development and another site near City D was selected for an Army Air Corps training field. Paved runways ranging in length from 5,500 to 5,714 feet were constructed and many buildings were built for administration and housing. After the war the city administration proposed to the electorate that the old municipal field be abandoned in favor of the military facility which had been offered to the city by the federal government. During 1948, a bond issue election proposed $100,000 for conversion of the military base to a municipal airport.

These funds, along with funds derived from the disposal of surplus land and property provided the city's share of $310,000 spent on the terminal building and landing area for the conversion. The terminal building is a modern masonry structure built at a cost of $210,000

and contains approximately 8,200 square feet (excluding the control tower). Estimates of federal government wartime expenditures were not available at City D, but obviously the bulk of the investment in the field was from this source.

In addition to fine runway and terminal building facilities, the city owns a number of large hangars left by the military development and a number of sub-standard barracks buildings which are rented by the city as apartment units. They are unsightly buildings and it is obvious that any revenues which they provide are of a temporary nature unless substantial repair work is accomplished.

Operating Revenues and Expenses

Again, the researcher is faced with accounting data based on the nature of the expense or the source of income. City D operates a gas and oil business so that the salaries and other expenses incidental to this operation should be charged against the gross profit of the enterprise. This city does not even indicate a gross profit, but rather shows gross sales as revenue and includes the cost of goods sold in an operational expense account. The following table indicates the account classification for expenses.

TABLE 12
AIRPORT SUMMARY

Operational Expense	*1956**	*1955*	*1954*
Salaries and Wages	$31,244	$30,229	$29,120
Supplies	5,160	198	4,514
Maintenance of Structures	1,000	486	5,021
Maintenance of Equipment	3,250	2,180	3,104
Misc. Services	11,145	28,899†	9,142
Sundry Charges	25,830†	8,821	28,071
Total Operating Expense	77,629	70,813	78,971

Source: City Records.

*Estimates budget figures for fiscal 1956.
†Cost of Goods Sold was included as Sundry Charges for fiscal 1954 and budget 1956, but has been changed and shown as Misc. Services for fiscal 1955.

Examination of the detail of budget estimates for 1956 gave a basis for estimated allocation of expenses to functional classifications. A resulting percentage analysis was then applied to the actual 1955 amounts for allocation. It is seen that conventional municipal accounting practices are inadequate for the accounting for the operation of a municipal airport. It is difficult for the casual observer or interested citizen to uncover the real expense-income relationship existing at the airport. Original records must be examined and interviews with several different city officials are necessary before one can present an intelligible account of these records.

Even the revenue accounts at City D require analysis before a functional allocation can be made. The gas and oil sales income is a gross sales amount with the cost of goods sold shown in another account. There is no separation of terminal building rentals from hangar rentals.

TABLE 13
STATEMENT OF INCOME
CITY D (1955)

	1955
Gas and Oil Sales	$32,733
Miscellaneous	159
Aircraft Storage	2,798
Hangar and Land Rentals	16,075
Apartment Rentals	7,073
Landing Fees	6,154
Total Income	$64,992

Source: Original Airport Accounting Records.

The landing fees are based on a sliding scale with provision for a weight frequency adjustment. The system employs a drastic reduction in average landing fees when more than four daily schedules are operated. The fee declines from $90 per schedule to $25 per schedule from the first to the fifth.

TABLE 14
LANDING FEES
CITY D

Daily Schedule	*Monthly Fee**
First	$90
Second	70
Third	50
Fourth	30
Over Four	25

*A surcharge of $1 per thousand pounds in excess of 26,000 is levied against schedules using heavier equipment.

As already noted, the apartment rentals derive from frame-tarpaper buildings in bad repair. This income, and other land rentals from non-aviation tenants is allocated as "other income." Aviation tenants lease hangars based on a 30 cents per square foot annual rental and aircraft storage is handled by fixed base operators on a 50-50 division of revenue basis.

The two airlines serving the airport pay $2.50 per square foot annual rental for office and ticket counter space in the modern, air-conditioned terminal building. The airport restaurant is assessed 5 per cent of gross sales amounting to $749 in rental income during 1955. Rent-car concessions pay 7 per cent of gross sales. Federal government offices provide over $200 per month rentals and insurance machines provide the usual $12 per month plus 13 per cent of gross sales. The functional estimates of net revenue are indicated in the following table.

TABLE 15
FUNCTIONAL OPERATING STATEMENT
CITY D (1955)

Terminal Building and Administration			
Income			
Airline Rentals		$ 2,268	
Concessions		1,258	
Govt. Offices		2,820	
Misc.		159	
Total		6,505	
Expenses		16,393	
Net Terminal Bldg. and Adm.			$(9,888)
Landing Area			
Income			
Gas and Oil Business			
Sales	$32,733		
COGS	23,584		
Gross Margin		9,149	
Landing Fees		6,154	
Total		15,303	
Expenses		19,913	
Net Landing Area			(4,610)
Hangars			
Income			
Hangar Rentals		4,080	
Storage		2,798	
Total		6,878	
Expenses		6,192	
Net Hangars			686
Other (non-aviation)			
Income			
Apartment Rentals		7,073	
U.S. Govt.		1,200	
Other		4,449	
Total		12,722	
Expenses		4,731	
Net Other			7,991
Net Airport Operating Revenues (loss)			(5,812)

The municipal airport of City D represents an airport which is a fine facility, with the bulk of the capital costs provided by the federal government, but which cannot even pay out-of-pocket operating expenses. Substantial estimated losses accrued to the operation of the Terminal Building, the Landing Area also incurred a loss, the Hangars showed a small profit, and the best showing was with the largely temporary income of the non-aviation Other Income.

An analysis of the Gas and Oil Business of City D provides a dramatic illustration of the pitfalls contained in normal municipal accounting methods.

TABLE 16
OPERATING STATEMENT
CITY D'S GAS AND OIL BUSINESS
1955

Income		
Sales	$32,733	
Less COGS	23,584	
Gross Margin		$ 9,149
Expenses*		
Salaries (4 men)		14,510
Net Income (loss)		5,361
Approximate gallons pumped 112,000		
Revenue which would have accrued to city at 3 cents per gallon		3,360
Estimated net cash loss by municipal operation		(8,721)

*Only salary expenses are considered in this conservative estimate—actually additional expenses of maintenance should also be included.

This case illustrates the usefulness of the application of cost accounting in the operation and management of a municipal airport. The real net income relationships are quickly obscured by usual municipal accounting methods.

Traffic

The two airlines serving City D operate about 4,000 flights per year which constitute some 14 per cent of the traffic movements at the field. Military movements are the highest of the cities in this study with 29 per cent, and civil aircraft make the balance of 57 per cent of traffic movements.

The 1955 population estimates place the city size at 105,000 persons and passenger boardings of 12,058 during 1955 make an average of 115 passengers enplaned per thousand population. The average number of passengers boarded per flight was 3.0. Although City D was third largest of the cities studied, it ranked lowest in passengers per thousand population, passengers per flight, and net airport income.

Management

City D has the City Manager-Board of Commissioners form of government with all major department heads reporting to the City Manager. The organization plan for the city indicates a span of control for the City Manager comprising 12 department heads, one of these being the Airport Manager. Although the Board of Commissioners has seven citizen participation boards serving in advisory and planning capacities, no such board exists for the city's airport operation.

Summary

City D is a city which received substantial airport facilities from the federal government and, as a result, embarked on a very ambitious development program. The airport cannot pay operating expenses

even with the addition of obviously temporary revenues from barracks-type housing rentals. A review of estimated functional cost accounting records indicates that the drastic sliding scale for landing fees and the municipal operation of the gas and oil business contribute to the deficit of the operation. Again the necessity of functional allocation of revenues and expenses for the purpose of cost control and setting of rentals and user charges is emphasized in practical operation.

Airport of City "E"

City E's interest in development of a municipal airport was stimulated in 1939 when the Army Air Corps, operating at a private field, threatened to move out unless improved facilities could be provided. A bond election for the purpose of "protecting City E's position on the air maps" was called and $125,000 in general obligation bonds were authorized for the project. The amount was spent for the purchase of the 230-acre field and for the paving of the runways.

Two years later, under press of defense requirements, the military air arm proposed that the city participate in developing a field lying halfway between the city and another smaller city, about ten miles from each. Ironically, the bond issue election was called for December 1, 1941, one week before the project was to be forcefully changed from a defense to a wartime endeavor. Initial commitments of the city were for $60,000 in improvements with the agreement that the federal government would spend an additional $289,000. It is obvious that military expenditures exceeded this amount at the field which has three major runways ranging in length from 6,499 to 6,642 feet. In addition, a water and sewerage system was built and many buildings were constructed at the base. After the war the facility was turned over to City E by the federal government with the understanding that the city would maintain the field and utilities for use in any national emergency.

TABLE 17
OPERATING EXPENSES
CITY E

	1954-55	*1953-54*
Personal Services:		
Management	$ 8,400	
Clerical	3,410	
Labor Operations	45,010	
Extra Help	328	
Total Personal Services	57,148	$53,612
Supplies:		
Office	671	
Food	52	
Clothing	143	
Minor Tools	198	
Janitor	440	
Chemicals	152	
Total Supplies	1,656	2,076

TABLE 17 (Continued)

Contractual:		
Communications	797	
Hire of City Equipment	6,295	
Insurance	640	
Special Services	7,516	
Advertising	242	
Traveling Expense	1,013	
Heat	4,175	
Light and Power	12,592	
Laundry	13	
Other	86	
Total Contractual	33,369	25,227
Maint. of Structures:		
Buildings and Grounds	9,180	
Disposal Plant	239	
Sewers	....	
Water Wells	1,850	
Runways	336	
Water Mains	226	
Total Maint. of Structures	11,834	13,710
Maintenance of Equipment:	1,041	396
Bad Debts:	309	1,428
Total Expenses:	105,357	96,449

Operating Expenses and Revenues

The allocation of expenses and revenues for City E is probably the most difficult and least accurate of the cities in this study. This results from lack of a cost accounting system (one was installed in mid-1956) and from the magnitude of non-airport revenues and expenses. The facility rents about 150 residential and 50 commercial units which are composed of buildings remaining from military development of the field. Again, the municipal accounting system confounds the researcher in attempting to determine net revenues of the airport functions. Of course, for City E, this is relatively unimportant since a cost accounting system is now operative which will provide accurate monthly information for management.

The city does not operate a gas and oil business, but rather franchises this activity to the fixed base operators at 4 cents per gallon. In spite of this, there is a substantial Labor Operations account which must be allocated to the airport functions largely on the basis of estimates and "guestimates" of airport administration and of the researcher. The city classification of expenses is evident in Table 17.

The income statement of City E presents an unusual condition. The income from Gas and Oil Franchises nearly equals the income from commercial airline landing fees—and without municipal operation of the fueling facilities. Other revenue accounts are readily allocable except for the Aviation Income account which had to be further analyzed. Review of original accounting records showed that about

$15,000 of this account derived from terminal building income. The coffee shop paying $165 per month plus 5 per cent of gross sales (over $6,000) made up nearly $3,000 income. Rent-car paying $40 per month plus 7 per cent of gross contributed a surprising $5,187, and the two limousine operators (one to each of the neighboring cities) paid 5 per cent of gross sales amounting to about $1,800 income. The airlines pay $2 per square foot annually amounting to nearly $4,000.

The remainder of the Aviation Income account derived from fixed base operator and airline service building rentals amounting to over $12,000. This amount was allocated to Hangars.

TABLE 18
OPERATING REVENUES
CITY E AIR TERMINAL
FISCAL 1955

Revenues	
Residential Rentals	$ 62,609
Commercial Rentals	53,062
Aviation Income	27,300
Landing Fees	15,471
Utilities	5,140
Gas and Oil	14,892
Miscellaneous	4,753
Total Revenues	183,227

Landing Fees are based on $70 per month per schedule for aircraft up to Convair weight (39,000 pounds) with a surcharge for additional

TABLE 19
FUNCTIONAL OPERATING STATMENT
CITY E (1955)

Terminal Building and Administration		
Income		
Concessions	$ 11,020	
Airline Rentals	3,960	
Govt. Office and Misc.	92	
Total Incomes	15,072	
Expenses		
Personal Services	26,742	
Supplies	1,656	
Contractual	11,104	
Maint. Structures	1,076	
Maint. Equipment	260	
Total Expenses	40,838	
Net Terminal and Adm. Income		($25,766)
Landing Area		
Incomes		
Landing Fees	15,471	
Gas and Oil	14,892	
Total Incomes	30,363	

TABLE 19 (Continued)

Expenses		
Personal Services	6,842	
Contractual	7,905	
Maint. of Structures	3,733	
Maint. of Equipment	260	
Total Expenses	18,740	
Net Landing Area Income		11,623
Hangars		
Income	12,228	
Expenses		
Personal Services	8,182	
Contractual	4,629	
Maint. of Structures	3,186	
Maint. of Equipment	261	
Total Expenses	16,258	
Net Hangar Income		(4,030)
Other		
Incomes		
Residential Rentals	62,609	
Commercial Rentals	53,062	
Utilities	5,140	
Miscellaneous	4,753	
Total Incomes	125,564	
Expenses		
Personal Services	15,382	
Contractual	9,731	
Maint. of Structures	3,839	
Maint. of Equipment	260	
Bad Debts	309	
Total Expenses	29,521	
Net Other Income		96,043
TOTAL OPERATING INCOMES		$77,870

weight at the rate of 8 cents per thousand pounds-per landing. Although the present landing fees constitute no sliding scale, a fee of this type is being considered by the administration as follows:

First 10,000,000 pounds	9¢ per thousand
Next 5,000,000 pounds	8¢ per thousand
Next 5,000,000 pounds	7¢ per thousand
Over 20,000,000 pounds	6¢ per thousand

The effect of the application of a sliding scale basis for landing fees is discussed in the conclusions.

Traffic

The commercial airline schedules at the field make up about 25 per cent of the traffic movements, military flights 16 per cent, and the civil aircraft 59 per cent of the movements.

The population of the two cities serviced by the airport totals 97,000. Passenger boardings of 49,428 represent 496 boardings per

thousand and 6.2 passenger boardings per flight for 1955. On these bases, City E has the most favorable traffic characteristics of any of the cities included in this study.

Management

The city has the City Manager-Council form of government and the Director of Aviation reports directly to the City Manager. The airport presents the largest job for administration in terms of facilities and income of any of the cities studied. The magnitude of the total net revenues of the airport seems misleading, however, since the administration faces a problem similar to that of City D. An independent consultation has recommended that 50 per cent of the ex-military buildings which provide non-airport income should be abandoned and that the "outlook for development of permanent commercial businesses on land leased or sold by the city is not bright." Such conditions present a vital challenge to management of this municipal airport.

Summary

It is seen that City E has the largest operation of the cities studied, resulting from exceedingly high non-airport activity income. It is estimated (rather "guestimated") that the Terminal Building and Hangars operated at a loss. The Landing Area, because of relatively high franchise income, turned a profit. The bulk of the net income (under any accounting system) clearly derives from non-airport activities. These are temporary and will not continue unless substantial investment is made.

The introduction of a cost accounting system by this airport promises to enlighten the administration to the need for cost control and analysis. The traffic characteristics of this airport promise opportunity for profitable operation—even on the basis of airport functions.

General Conclusions

The analysis of municipal airport development at medium size cities gives rise to reflection upon some of the principles of municipal airport operation which have presented themselves. These should be generally applicable conclusions which might be drawn from the study of airports here included and which may provide a sound basis for policy decisions for airports of this type.

First, consider the more general question: By what philosophy do cities provide and operate airport facilities? The alternatives (in the broad sense) are free business enterprise, regulated public utility under private ownership, public-ownership with private operation, and public ownership and operation. Since this is the basic starting point in evolving principles, some discussion is in order.

The "Bollinger Report" drew conclusions of interest to this question:[4]

[4] *Ibid*, p. 3. (Italics mine)

> A basic conclusion of the study is that the *majority of terminal type airports can be made self supporting within a comparatively few years without an undue burden on aviation,* provided that a sound financial plan is established and all revenues are aggressively developed.

Further, the study concludes that aviation "like other means of transportation should, in the best public interest, be on a self-supporting basis." The report sets forth some rules or principles concerning the operation of terminal type airports:[5]

> The airport owner should not exploit interstate air commerce by charging excessive fees, but is entitled to collect a reasonable fee to cover his *full cost* of the services rendered.
>
> Each user of the airport should pay proportional charges to cover his share of the cost of those facilities needed and used by him.
>
> Each user's share of the costs should include annual operation and maintenance expenses, *interest and depreciation on the prudent investment* in facilities required for his purpose, and an equitable local tax charge.

What has happened since the "Bollinger Report" set forth such optimistic predictions of self-sustaining airports, charging fees to cover their full costs of operation? Ten years later it is pointed out that "few airports are self-supporting, although traffic is rising so rapidly that *some* of the metropolitan airports are paying their way *or soon will be.*"[6] This is a far cry from the expectations that most terminal type airports would soon (after 1946) "pay their own way."

The following general conclusions are based on a rather limited study of five municipal airports serving medium size cities. This admittedly does not approach a random sample of the characteristics of airports, even those of medium size cities. Rather, this sample includes airports picked for their characteristics to indicate different kinds of problems. For example, one of the facilities has been built completely on virgin land since the war; two represent airports which do "pay their way"; and another has a fine facility which cannot even pay its direct costs of operation. The contrast of these operations provides the basis for deriving some general principles.

> 1. In general, the capital cost characteristics of terminal type airports at medium size cities preclude the use of private capital for their construction.

For many years federal government has regulated railroads and electric utilities partly because the exceedingly high capital costs and the sunken capital nature of these businesses render them unsatisfactory for free competitive business enterprise. Indeed, in many countries these industries are owned and operated by government. Each airport included herein boldly proclaims the fact that airports have much higher capital costs (lower capital turnover) in physical facilities which, if possible, are more sunk than in the case of railways and elec-

---

[5] *Ibid*, p. 6. (Italics mine)
[6] *The Wall Street Journal*, Feb. 1, 1956, p. 4. (Italics mine)

tric utilities. A further extension of this principle might well be that airports at medium size cities cannot be expected to pay their way (that is, to cover all costs of operation including capital costs) out of airport function revenues. Even at the two paying airports in this study, it is seen that the city operating as farmer or rentier (not as airport operator) makes this possible—not to mention the fact that the bulk of capital costs at these facilities were borne by the federal government.

Thus it is determined that, if a city is to have an adequate airport, the municipality (or some other agency of government) must contribute the capital investment to build the physical facilities. This leads directly to another principle:

> **2. The decision whether or not to have an adequate municipal airport is principally a political one — to be decided by the voters at the polls. It cannot and should not be determined by the economic criteria of whether or not such a facility can "pay its way" or be profitable to the city.**

If an airport could be operated profitably, to cover full costs and pay in lieu of taxes income to the city, then there is question about the propriety of its being a publicly owned facility. It should then be either free business enterprise or a regulated public utility. It is established that such a facility cannot pay its own way (on the basis of airport functions), and therefore the question becomes political. It is political in that the decision must be based on public interest factors such as pride of the community, usefulness of the facility to the residents of the community, and the indirect benefits to commerce of the community deriving from commercial airline service. Once this political decision has been made, then the economist must be called upon to implement the decision in the most efficient way, whether or not full costs of operation are covered.

An important decision is the determination of the kind and extent of the physical facilities. For example, the length and number of runways, the size and construction of the terminal building, and the kinds of hangars must be determined. As seen, the bulk of the investment at an airport is in providing the landing area. The landing area facilities for minimum operations are determined largely by the size of the largest planes to serve the city, the natural characteristics of the field for drainage and grading, and the climatological characteristics of the area. The principal determination, though, lies with the size of the commercial airliners which will serve the city. This indicates the third principle concerning the magnitude of capital investment required at an airport.

> **3. The physical facilities which must be provided are determined largely by the airline traffic burden (aircraft and passenger) upon the facility.**

A city does not have much discretionary authority in determining the facilities which it will provide. The major investment, runways,

is determined by the kind of aircraft which will serve the city. Terminal facilities must be provided to accommodate passenger traffic burden. The airport must be designed initially for ready expansion as additional traffic is generated or additional airlines are certificated to serve the city. Failure to provide the minimum facilities, to maintain them after they are provided, or to expand them as needed can only result in suspension of commercial air service to the city.

An example of the rapidity with which cities must respond is seen in the change in runway requirements since the 1946 Bollinger Report:

TABLE 20
RUNWAYS FOR VARIOUS SIZE CITIES

Kind of Terminal	*1946 Runway*	*1956 Runway*
Limited Stop Airport (Pop. 30,000-300,000)	3500-4500	5000-6500
Intermediate Terminals (Pop. 300,000-1,000,000)	4500-5500	6500-8000
Major Terminals (Pop. over 1,000,000)	5500-6500	8000-10,000

With the introduction of 118 passenger jet airplanes, the heavier aircraft now in use on long stage routes will be moved down to shorter stages through the intermediate cities. It appears that the runway requirements for airports will continue to increase for these intermediate cities over the next ten years. Rather than meditating upon the question concerning when these facilities will reach maturity and become paying airports, city administrators will do well to ponder the source of funds for the next runway extension!

Once the physical facilities have been provided and the installation becomes an operating airport, many more decisions concerning these operations must be made. The basis for these decisions is important. Sound decisions can result from a base of sound accounting for the operations of the airport. Consequently, another important principle concerns the methods of accounting for the net incomes of the various functions at an airport.

> 4. The accounting for operations of an airport should be maintained on an accrual-cost accounting basis, with costs and revenues allocated to accounts on the basis of airport functions as well as by source.

There are many decisions which should depend upon accurate cost accounting analysis if they are to be the best possible decisions. One of the more obvious areas where this is true is in setting user charges. If airport administration is unaware of the income-expense relationships existing for each of the airport functions, then logical user charge policies are difficult to construct. Another area in which cost accounting results are useful is in cost control. The identification of costs of operation with the functions for which they are incurred is a necessary prerequisite for effective cost control.

Every airport administrator should have monthly operating statements to show him how his airport is operating. As elementary as this may seem, only one of the airports in this study has in the past provided airport management with this valuable tool.

TABLE 21
RECOMMENDED FUNCTIONAL ACCOUNT CLASSIFICATION

Terminal Building
Incomes
- Airline rentals—include terminal building office rental, other building rentals, gasoline tank rentals, antenna location rentals, etc.
- Government offices—include terminal building offices, all other buildings rented by CAA or Weather Bureau including control tower and antenna sites.
- Concessions—includes all payments deriving from concessionaries including restaurant, rent-cars, vending machines, telephone booths, etc.
- Miscellaneous Rentals—income from offices other than listed above.

Landing Area
Incomes
- Scheduled Landing Fees—all landing fees computed on a monthly schedules per day basis for airlines.
- Non-scheduled Landing Fees—landing fees collected from non-scheduled commercial operations, and military landings.
- Gas and Oil Franchise Income—all payments by the franchised Gas and Oil dealers on the field.

Hangars
Incomes
- Fixed Base Operator Rentals—include rental on fixed base operator hangars, city's per cent of gross on tie down and outside storage, and the per cent of gross sales, if any.
- Other Hangar Rentals—include rentals of city owned "T" hangars and all other hangar rentals.

Miscellaneous
Incomes
- Sales—include sale of surplus land and/or property regardless of functional use.
- Agricultural and Industrial—include all non-aviation rentals (except in terminal building).
- Other Income—include all additional miscellaneous incomes, e.g. incomes from air shows or military rentals accruing from special exercises or maneuvers.

A similar classification of expenses allows computation of the net revenues accruing to each of the airport functions.

5. All possible commercial operations should be delegated to private operators under lease agreements of sufficient duration to permit aggressive development by the operators but not so long as to eliminate city control of unfit operators.

This principle rests upon the assumption that private operators of commercial activities at municipal airports can and will develop net revenues exceeding those which normal municipal operation will produce. There are no doubt exceptions to this general principle where very good municipal operation exists or where exceptionally poor

private operation is in evidence. However, the conclusion of this study is that, in general, the positive incentive of profit should be utilized in private operations to render the greatest net revenues to the airport. In order to do this, operators must be assured that their time and investment will be protected for a sufficient length of time to allow them to develop their enterprises. At the same time the municipality must protect itself against entrenchment of an unfit operator by providing some kind of occasional renewal of the agreements.

The operation of fueling facilities represents the kind of activity referred to in this principle. Three of the cities studied operated municipal fueling facilities. For at least two of them, the net revenues of the airport would clearly have been increased by franchising fueling activities to private operators.

> 6. Airline rentals in the terminal building should reflect full cost (operating and capital costs) including a share of the building management costs for a proportional share of the public space. Concessions should be charged "what the traffic will bear" consistent with adequate service (percentage of gross sales agreements). Government offices, where terminals have been built with federal assistance, should pay nominal rent plus a full share of the building management costs.

Assuming that a functional terminal building is used (*as opposed to the monument type terminal so common for railroads*), the airlines should be willing and able to pay full costs of their share of the facility. For concessions, "what the traffic will bear" will be different at different airports. One airport in this study subsidized its coffee shop just to keep it in operation. At another extreme it has been noted that concessions in 1955 at the Detroit airport amounted to 70 per cent of the cost of operating the airport.[7] Results of aggressive development of concessions are indicated in the fact that at Denver and Newark some 80 per cent of the dinner revenues at the airports are generated among local citizens who do not come to the airport for aviation purposes.[8]

The most common agreements at the cities in this study called for 5 to 7 per cent of gross sales of restaurants, 10 per cent for rent-car and limousine operators, and 7 to 10 per cent of gross sales for non-food item concessions.

Another important problem is determination of the basis for setting the landing fees of the airlines. These are user charges intended to reflect the airline's share of the operating costs of the Landing Area. Discussions with airport administrators suggest the next principle:

> 7. Commercial airline landing fees should reflect *net* landing area costs of operation and should be based on a simple weight-frequency scale *with no provision for sliding scale or quantity discount.*

---

[7] R. W. Ireland, "Airport Problems of the Airlines," *J. of Air Law and Commerce*, Winter 1956, p. 15.

[8] S. B. Richmond, "Some Aspects of Planning for New Sources of Airport Revenues," *Ibid.*, p. 21.

Each airport included in this study has utilized some form of a sliding scale in the setting of landing fees. This is a form of quantity discount which provides a decreasing average landing fee as the number of schedules operated by an airline increases. One of the airports intends to abandon the sliding scale in favor of a simple weight frequency fee. The reasoning behind this is based on doubt that there are any significant economies of scale resulting from increased usage of the landing area by a carrier. Wear and tear, and therefore costs of operation are largely a function of the number of landings by the heavy commercial airliners.

Ordinarily quantity discounts also have the purpose of increasing business (revenues) by encouraging purchase of greater quantities. Landing fees, however, constitute a very small part of airline costs and it is doubtful that the level of landing fees bears significantly upon the decision to operate additional schedules. Of course, this decision is based upon more important factors such as traffic estimates and equipment utilization.

Additional factors enter into the consideration of the usefulness of the sliding scale. The use of this type of landing fee, where reductions of over 50 per cent after the fourth schedule are noted, clearly charges the airline with the least number of schedules a higher average landing fee than is paid by a competitor having more favorable routes, operating more schedules, and therefore better able to help defray landing area costs. The opposite should be the case. The greater the traffic load out of a station for a particular airline, the more profitable will be the operations. With increased traffic, the airline will use larger, more efficient aircraft. This, at the same time, will increase even more the profitability for the airline, and increase the cost of operation of the landing area. There seems no justification for decreasing the average landing fees for such a carrier while maintaining higher average fees for a weaker competitor, operating smaller equipment, and generating less traffic. The following table illustrates the increasing revenue producing capacity of aircraft as size increases.

TABLE 22
COMPARISON OF GROSS WEIGHT AND PASSENGER CAPACITY
SHORT STAGE TYPE AIRCRAFT

Type of Aircraft	*Gross Weight*	*% of DC3*	*Passengers*	*%DC3*
DC3	25,200 lbs.	100	21	100
Convair 340	47,000	186	44	210
Viscount 810	67,500	268	52	248

Source: *American Aviation*, April 23, 1956, p. 141. The seating configurations are for basic 1st class arrangement.

These relationships combined with the lower seat-mile costs of operation suggests that the economic ability to pay landing fees increases with the size of the aircraft. This relationship does not hold

true for the long haul four engine aircraft, but this is of little consequence since these medium size cities receive little if any four engine service.

Determination of the weight-frequency assessment on the basis of a fixed fee per thousand pounds of landing weight should be made by analysis of the net landing area costs. These may be determined by deducting landing area revenue (other than commercial airline landing fees) and net terminal building revenues (after full costs including capital costs) from the total operating costs of the landing area. The resulting net cost would then be assessed uniformly against landing gross weight of commercial airliners. This general method of determining landing fees, of course, would have to be adapted to the peculiar problems of the various installations.

Another problem lies with the determination of the rentals which the fixed base and hangar operators should pay. A rental basis must be designed to attract competent operators and at the same time provide a fair contribution to airport revenues.

> **8. Fixed base operators should be charged minimum fixed rentals reflecting the operating costs of the function plus a percentage of gross sales (except from the sale of aircraft) reflecting ability to pay.**

There are some difficulties in applying Bollinger's full cost assessment against airport tenants and users. The main difficulty is that, at current stages of development, they cannot pay such costs and earn enough return to attract competent operators. A more realistic approach is to set out-of-pocket costs accruing to the city as a minimum rental. Add to this amount a per cent of gross sales which will increase the income to the city as the operator develops and enlarges his business. The incentive to do a good job remains in this scheme without burdening the operator with an intolerable initial rental expense. More than any other lessee at the airport, the fixed base operator must work long and hard to build his business. His business is providing and maintaining safe airplanes for his customers. As a competent operator builds the confidence of his customers in his service, his business will increase. But if an attempt is made to collect full cost rentals at the outset, competent operators may not even enter the field.

The reason for excepting the sale of aircraft from rental computations is that this is an auxiliary function which adds no cost to the airport, and is conducted in intense competition with other dealers at other fields. A charge against such sales would place the operator at a competitive disadvantage with other dealers to the detriment of the local operator.

> **9. The line of authority and responsibility between airport administration and top-level municipal policy making should be direct, without intermediaries who are concerned with usual municipal administration activities.**

Airport administration is a hybrid activity among city administration functions. The capital cost requirements require municipal intervention into the field. However, the net revenues, and thereby the public contributions, are determined to a large extent by the successful development of commercial activities which are clearly outside the focus of usual municipal administration.

On the contrary, aggressive development and promotion by free business enterprise of operational activities is paramount in the successful overall operation of the airport. For this reason the chain of command must link directly from the airport management to the municipal policy-making function. The Airport Manager should be directly responsible to top city management. Cases have been shown of responsibility to the top executive officer of the city or, in one case, direct responsibility to the city legislative group. The latter is a radical departure from the established patterns of the City Manager type of government and would probably meet great resistance at other cities.

Another consideration is the type of executive leadership which exists at an airport. Salary scales of cities in this study ranged from a low of $4,200 (at the city having the most favorable traffic characteristics) to a high of over $10,000 per year (at a city having considerable non-airport function income). A really qualified airport manager must be not only a public servant. He must be a one-man airport Chamber of Commerce; public relations specialist; one thoroughly familiar with problems of commercial airlines, fixed base operators, and private flyers; and a man who is capable of negotiating contracts and of pleading the city's case before governmental aviation hearings.

The business of aviation is a constantly and rapidly changing one. Successful airport administration is dependent upon the ability of airport policy to change and adapt to these ever changing conditions. The ability to do this depends to a great extent upon competent executive leadership and the existence of direct channels of authority and responsibility between airport administration and top level city management.

The Problems Reconsidered

At this point the Bollinger Report questions noted in the introduction may be reconsidered 10 years later. The first question (concerning by what standards inadequacies in present practices be determined and corrected) has been involved to a large extent throughout this study. The conclusion is that the starting point for such analysis rests with cost accounting methods. The allocation of expenses and revenues to the various airport functions provides the basis for determining and correcting inadequacies.

The second question concerns the propriety of furnishing airports at public expense. The second principle set forth above concerns this question and provides that such a question is one which the commu-

nity must decide at the polls. The question is whether or not the community is ready, willing, and able to finance an airport. Even with the availability of federal government matching funds, a community must be prepared to make a substantial local investment in its municipal airport. The next question of user charges has been treated above in principles 5 through 8.

The final question of whether or not the municipal airport of the medium size city can become self-sustaining without placing an undue burden on aviation requires further comment. The analysis depends upon the meaning of the term self-sustaining. The Bollinger Report envisioned self-sustaining airports as those which earn revenues equal to the sum of operating expenses, depreciation, debt service or bond interest payments, and "in lieu of tax" charges (intended to reflect the loss of tax income to the city by converting land to airport use). If this definition of self-sustaining is accepted, then the conclusion of this study is that these airports cannot become self-sustaining on the basis of airport function revenues. Only where substantial non-airport function revenues (such as agricultural or industrial revenues) have been developed are self-sustaining operations in evidence. At the two self-sustaining airports in this study over 50 per cent of total revenues were derived from agricultural, industrial, and residential rentals.

For communities not blessed with the possibilities or the community desire to enter into these activities, another concept of the term "self-sustaining" is in order. In such cases the community must recognize that favorable traffic characteristics, sound management and cost control and aggressive development of concession revenues will be necessary even to make the airport self-sustaining on the basis of operating expenses. If the community is satisfied with the operation of its airport on this basis it may well be called self-sustaining.

Thus the answer to this last question of the Bollinger Report is not yet clear, especially in the case of airports at medium size cities; rather, it is a question which will remain to be studied by each community when it determines its municipal airport needs and aspirations.

EDITORIAL

EDWARD CLEAVELAND SWEENEY RESIGNS EDITORSHIP OF THE JOURNAL

By Stanley Berge, *Associate Editor*

HAVING been appointed General Counsel of the General Services Administration in 1956, Professor Edward C. Sweeney has found it necessary to resign his position as Editor-in-Chief of the JOURNAL. We sincerely regret that pressure of his new duties has forced our very capable editor during the past eleven years to take this action. We trust that as one with a dedicated interest in air transport and air law, Mr. Sweeney will continue to contribute articles and suggestions to the JOURNAL.

A brief sketch of Professor Sweeney's activities prior to his undertaking the editorship of the JOURNAL was published editorially in Winter 1947 issue.

As Professor of Law at Northwestern (on leave) and Editor of the JOURNAL, Professor Sweeney served as Special Legal Advisor to the President's Air Policy Commission (Finletter Commission), September-November 1947, and as principal staff consultant to the Joint Congressional Aviation Policy Board, November 1947-March 1948. From May to September 1948, he served as staff officer of the Hoover Commission on Organization of the Executive Branch of the Government, and in this capacity prepared a study of the Civil Aeronautics Board for the Committee on Independent Regulatory Commissions.

From 1949 to 1955, Professor Sweeney served as Aviation Counsel (Professional Staff Member) of the U.S. Senate Interstate and Foreign Commerce Committee. In 1956, he was a member of the United States Delegation to the Inter-Governmental Committee on European Migration at Geneva. Also in 1956, he served as special consultant and geographer on a Joint U.S.-Canadian Arctic Weather Stations inspection.

As an active civilian pilot, Mr. Sweeney has owned several aircraft, and in 1952 flew a single-engine Cessna 170, with another private pilot, from Paris through northern and central Africa en route to South Africa. His personal travel since 1951 throughout the entire African continent on four expeditions by motor, mule, air, and boat has included extensive visits with both government officials and leading citizens. In connection with these travels, he has produced several films and lectured on African areas.

His continuing interest in aviation is indicated by his position as Treasurer of the National Aeronautic Association, and his membership in the Aeronautical Law Advisory Committee of the American Bar Association.

With Mrs. Sweeney and their five children, he resides at 3300 Nebraska Avenue, N.W., in Washington, D.C.

INTERNATIONAL REVIEW

Compiled by J. G. GAZDIK in cooperation with DR. G. F. FITZGERALD and MR. A. M. LESTER (ICAO) and MISS S. F. MACBRAYNE.

I. INTERNATIONAL CIVIL AVIATION ORGANIZATION
  a. Report of the Economic Commission to the 10th Assembly
  b. Final Report of the Executive Committee to the 10th Assembly
  c. ICAO "Jet Age Task Force": Implementation Panel discusses Air Traffic Control and Communications in the North Atlantic, European, South American and Caribbean Areas.

II. INTERNATIONAL AIR TRANSPORT ASSOCIATION
  Meeting of the Facilitation Advisory Group

III. INTERNATIONAL CHAMBER OF COMMERCE
  Meeting of the General Transport Commission: Taxation of Air and Sea Transport

IV. INTERNATIONAL LAW ASSOCIATION
  47th Conference: Three resolutions on international air law

V. INTERNATIONAL INSTITUTE FOR THE UNIFICATION OF PRIVATE LAW
  Conference of Specialized Organizations

VI. UNITED NATIONS ORGANIZATION
  Meeting of Committee on Experts on the Transport of Dangerous Goods

I. INTERNATIONAL CIVIL AVIATION ORGANIZATION

A. REPORT OF THE ECONOMIC COMMISSION TO THE ASSEMBLY

ACTION ARISING OUT OF THE AGENDA ITEMS REFERRED TO THE ECONOMIC COMMISSION

Charges for air navigation facilities, including airports (Basic Documentation A10-WP/22, EC/2)

The Commission considered that, since an international meeting on airport charges had already been arranged by the Council for November 1956, and since the Air Transport Committee's study on charges for route air navigation facilities and services had only recently been distributed, there was no need for the Assembly to give any specific instructions on this subject at this time. Views were expressed that it might have been better to have deferred the airport charges meeting until charges for route facilities could be examined at the same time and until States' policies on the whole subject were more developed, but no specific proposals were made for a change in the plans for the meeting.

The final relevant Resolution (A10-31) reads as follows:

> THE ASSEMBLY NOTES the action taken by Council in its study of charges for air navigation facilities, including airports, and the course that further work in this field may be expected to follow in the future.

Prospects of and methods for achieving further international agreement on commercial rights in international air transport (Basic Documentation A10-WP/23, EC/3)

In general the Commission was in agreement with the Council's proposals for future work in this field and on most points the Commission recommends that the Assembly should merely note and approve the relevant parts of the basic paper, although on some points modifications in the program are suggested. It was emphasized that the directives in previous Assembly resolutions on these subjects remain in force unless specifically modified.

Scheduled Air Services

The Study of Multilateralism in Europe. The Commission approved without comment that part of the basic document referring to ICAO's collaboration with the European Civil Aviation Conference in the study of multilateralism in the exchange of commercial rights for scheduled services in Europe.

The Delegate of Mexico announced that his Government intended to propose the convening of a meeting of the States in the Caribbean Region to consider their common air transport problems, in somewhat the same way as the European Civil Aviation Conference was considering European air transport problems. He did not, however, suggest that the Assembly take any action in this connection.

An Air Mail Multilateral Agreement. The Commission noted that difficulties have been reported from various quarters in connection with commercial rights for the transportation of air mail and that the Council proposed to attempt to develop a draft multilateral agreement concerning these rights for submission to the Universal Postal Union Congress of 1957. The Commission felt, however, that not enough was known of the reported difficulties to justify an attempt to draft a multilateral agreement at the present time and that the views of contracting States and the Universal Postal Union on the subject should be further explored before any specific action was set on foot.

An Air Cargo Multilateral Agreement. The Commission noted that the first Strasbourg Conference of 1954 had recommended that member States should grant greater freedom of operation to scheduled air cargo services in Europe, and the Council's proposal to attempt to develop a worldwide multilateral agreement on a similar basis. The Commission observed that the action taken by the European Conference was of extremely limited scope and that it would be premature to base any general worldwide action on it. ICAO should, however, keep a close watch on European developments to see whether any results of general interest might transpire in due course.

The Comparative and Analytical Study of Bilateral Agreements. The Commission noted that some progress had been made in the comparative and analytical study of the provisions of bilateral agreements, and approved the proposal to continue this study, noting that it was not regarded as aiming primarily at the standardization of those provisions as its title in the basic document would suggest.

Non-Scheduled Operations

The Possibility of a Worldwide Multilateral Agreement for Non-Scheduled Operations. The Commission noted that with the collaboration of ICAO, the European Civil Aviation Conference had developed a multilateral agreement giving substantial freedom to certain types of non-scheduled operation. The Commission agreed with the Council that this agreement might at a later date produce results that would be of interest to contracting States outside Europe, but it was felt that it might be some years before any such results would materialize and that it would be premature at the present time to attempt to generalize the European agreement into something applicable to the world as a whole. In the meantime, ICAO should continue to keep the development of non-scheduled operations in the world as a whole under review.

The Distinction Between Scheduled Air Services and Non-Scheduled Operations. The Commission noted that the Council had reviewed its definition of a scheduled international air service and had decided for the present to make no change in it. The Commission felt that no comment was neces-

sary on this matter and agreed with the Council's proposal to keep its definition under review and to study the results of the approach to this problem outlined in the European multilateral agreement.

Further International Agreement on Commercial Rights

The Commission felt that it would be premature to convene an international meeting to consider the exchange of commercial rights for scheduled and non-scheduled operations in 1957, as suggested by the Council. Such a meeting might, however, prove to be desirable within the period 1957-1959, and the Council will be able to determine when results of practical value may be expected to be achieved.

The final relevant Resolution (A10-32) reads as follows:

THE ASSEMBLY:

1. NOTES WITH APPROVAL the action taken by the Council in collaborating with the European Civil Aviation Conference in the study of multilateralism for scheduled air services in Europe and the Council's proposal to keep in close touch with that Conference and to continue to collaborate with it, and observes with interest the information that the regional approach to air transport problems is receiving attention by States outside the European region;
2. NOTES that certain difficulties have been reported in connection with commercial rights for the carriage of international air mail, and DIRECTS the Council to examine, in consultation with contracting States and the Universal Postal Union, whether there are any problems in this connection to whose solution ICAO might usefully and properly contribute, and, if so, to take suitable action;
3. NOTES the action taken by the European Civil Aviation Conference aiming at wider freedom for scheduled air cargo services in Europe, and DIRECTS the Council to keep a close watch on European developments in this field to see whether they may, in due course, be of interest to other contracting States;
4. NOTES WITH APPROVAL that part of the basic document dealing with comparative and analytical study of the provisions of bilateral agreements, including the proposal that this study be continued as part of the general study of commercial rights;
5. NOTES WITH APPROVAL the collaboration given by the Council and Secretariat to the European Civil Aviation Conference in the development of its multilateral agreement for non-scheduled operations, and the Council's proposal that the Organization should study the results of this multilateral agreement to see whether, in due course, a similar agreement can be devised for world-wide non-scheduled operations, emphasizing that it is likely to be some time before such results are visible and that in the meantime the development of non-scheduled operations in the world as a whole should be kept under review;
6. NOTES WITH APPROVAL that part of the basic document dealing with the study of the distinction between scheduled air services and non-scheduled operations, including the Council's proposals for future action;
7. NOTES the proposal to convene an international meeting in the period 1957-1959 to consider the exchange of commercial rights, but believes that 1957 would be too early for such a meeting, leaving it to the Council to decide when this meeting would have a reasonable prospect of achieving useful results.

ICAO policy in relation to International Air Mail
(Basic documentation A10-WP/24, EC/4)

The Commission, after hearing some comments as to the nature of the material that had been furnished the Universal Postal Union in the past, and the nature and extent of ICAO's comments thereon, noted that this material was improving in quality and coverage, and that ICAO had consistently refrained from trying to fix rates in this field. Even so, the Commission was of the opinion that extreme caution should be exercised in giving advice to the Universal Postal Union. On the whole, and subject to the foregoing reservations, it seemed that the Organization's existing policy, as set forth in its Document 6844 and modified by the Council on 16 March 1954 so as to direct the Secretary General to continue to furnish the UPU on request with information of a factual character which may be readily available, while other requests should be referred to the Air Transport Committee for recommendation to the Council, was satisfactory. The question of the extent to which contracting States should be consulted as contemplated by Resolution A4-21 when important material involving matters of policy was sent to the UPU received some consideration, and it was generally agreed that States should be consulted in cases where it seemed likely that they might hold strong and possibly divergent views.

The final relevant Resolution (A10-33) reads as follows:

> THE ASSEMBLY NOTES the history of the Organization's policy development in the field of international air mail, as set forth in the basic documentation, and RECOMMENDS that the Organization should adhere strictly to its present practice of having the Secretary General furnish the UPU, on request, information of a factual character which may be readily available, and that other requests should be referred to the Air Transport Committee for recommendation to Council.
>
> The Council should continue to exercise its discretion under Resolution A4-21 as to whether a proposed expression of opinion of recommendation concerning policy matters in the field of international air mail is of such a nature as to indicate the desirability of reference to the contracting States prior to any communication thereof to the Universal Postal Union. In doing so, the Council should bear in mind that, on matters of basic importance on which States might hold strong and possibly divergent views, it should ordinarily seek the views of States before committing them to a statement of Organization policy.

General review of the past work and the future program of the Organization in the economic field
(Basic documentation A10-WP/21, EC/1)

The Commission noted the review on the past work of the Organization in the economic field contained in the first half of the basic document, and observed that the future work program for the studies of airport charges, charges for air navigation facilities, commercial rights for scheduled air services and non-scheduled operations, and air mail, and future work in connection with the European Civil Aviation Conference, had already been dealt with separately under individual agenda items. This left to be considered only the last three items in the active list of studies in paragraph 14 of the basic document, and the reserve list of projects for attention as resources permit, in paragraph 15.

Definitions in the Air Transport Field. A number of delegates commented on the great difficulty of developing satisfactory definition for international use and queried whether the study of such definitions could produce any useful results except in the special and limited sphere of statistics. Other delegates felt, however, that definitions were extremely important and

justified study from their economic and general aspects as well as for the purposes of statistics. It was decided to accept the Council's proposal that this study should be continued.

Particular emphasis was laid on the importance of clarifying the distinction between international and domestic air transport, and attention was again drawn to the difficulties caused certain States by the definition of an "international air service" in Article 96 of the Convention.

Study of the Interchange of Aircraft. The Commission agreed that it would be premature at the present time to attempt to develop a general multilateral agreement governing the interchange of aircraft, based on the work done by the European Civil Aviation Conference. The economic aspects of the problems of aircraft interchange are, however, of importance to many States throughout the world and should continue to be studied. On the final item under paragraph 14, "Other Subjects," there was no comment.

Economic Implications of Long-Range Jet Aircraft. As a result of a proposal by the French Delegation, the Commission agreed (by a vote of 13 to 11) that ICAO should make a study of the economic implications of the introduction into service of long-range jet aircraft. This study would cover all economic problems raised by the new aircraft whose great speed, size and range affect every factor on which air transport economic depends. Some delegates felt that such matters would be better studied in connection with the other items of the economic or technical work program, and others were against the proposal on the grounds that the study was ill-defined and that no data was available, but a majority of the Commission were in favor of adding a study of this kind to the active part of the Organization's work program.

Projects for Attention as Resources Permit. Some delegates favored the elimination from the work program of the projects for attention as resources permit in paragraph 15 of the work program in the basic document, on the ground that these projects did not satisfy the criteria for the selection of subjects for study adopted by the Council and endorsed by the Assembly in resolution A7-14. In particular, the items relating to competition, air transport rates and subsidies were objected to as being difficult and costly to study as well as not satisfying the Council's criteria. Other delegates, however, felt that these three items were of such outstanding importance that they should be transferred to the active part of the work program set forth in paragraph 14 of the document. The Commission ultimately decided that the list of items for study as resources permit, should be retained in the form suggested by the Council and that these items should be surveyed in a preliminary way by the Secretariat. Before giving special attention to any one of them, however, the Council should satisfy itself that the state of progress indicated that international action would lead to concrete results.

The final relevant Resolution (A10-34) reads as follows:

THE ASSEMBLY:

1. NOTES the reviews of the past work of the Organization in the economic field contained in the basic document on this subject, in the relevant parts of the Council's Report to the Assembly and its Supplement, and in previous reports and documents;
2. NOTES the Council's proposed work program in the economic field for the years 1957 to 1959 contained in the basic document (A10-WP/21, EC/1), as modified by the Assembly's action on Agenda Items 27, 28 and 29 as regards certain activities listed for special attention in paragraph 14 of the work program;

3. NOTES that before giving the status of subjects listed for special attention in paragraph 14 to any of the reserve subjects listed in paragraph 15 of the work program, the Council will satisfy itself that the state of progress indicates that international action will lead to concrete results; and
4. DIRECTS the Council to include in its list of items to receive special attention in the years 1957 to 1959 a study of the economic implications of the introduction into service of long-range jet aircraft.

Program of Work of ICAO in the Facilitation Field, Including:
a. *General Program in the Facilitation Field*
(Basic documentation A10-WP/25, EC/5)

The Commission noted with satisfaction the substantial achievements of the Organization in the field of facilitation and the work program set forth in the basic paper. At the same time the Commission recognized that although the facilitation program had succeeded in clearing away many obstacles, steadily increasing speeds of aircraft and increasing volumes of traffic accentuated the seriousness of those that remained. It therefore appeared to the Commission that additional efforts were required (a) of Contracting States, through their aviation departments, National FAL Committees and through meetings with neighboring States; (b) of operators individually and through their associations (IATA, FITAP, FAI) providing additional cooperation and advice; and (c) of the Organization, through its Secretariat's furnishing further assistance as appropriate to the governments and other international organizations concerned. Such efforts, while primarily related to the elimination of deviations from Annex 9, should also be directed toward a wider implementation of recommendations, other than those included in the Annex itself, which the Council had made on the basis of Facilitation Division reports.

The final relevant Resolution (A10-35) reads as follows:

WHEREAS each State has certain obligations arising from Articles 22 and 23 of the Convention, and under Annexes to the Convention prescribed pursuant to Article 37 thereof, to adopt all practicable measures to facilitate air navigation and to prevent unnecessary delays arising under immigration, quarantine, customs and clearance laws; and

WHEREAS it appears that further efforts are required by contracting States in eliminating deviations from Annex 9 covering the Facilitation (FAL) field; and

WHEREAS the increasing traffic volume and speed of aircraft accentuate the importance of the work of ICAO in the Facilitation field; and

WHEREAS improvements in the Facilitation field are often difficult to achieve because the concurrence of several government departments, whose interest in aviation is only secondary, is frequently required; and

WHEREAS it appears that additional efforts are required of contracting States, through their aviation departments, national Facilitation committees, aircraft operators and their associations, to provide additional cooperation and advice, and of ICAO, through its Secretariat's furnishing further assistance as appropriate to the governments and other international organizations concerned;

THE ASSEMBLY RESOLVES:

1. That each State should give special attention to its obligations arising from Articles 22 and 23 of the Convention and increase its efforts to implement Annex 9 on a uniform basis, as well as the additional

recommendations made by each FAL Division Session in the field of Facilitation, and should take the initiative from Annex 9 which exist in its national practices, particularly with a view to eliminating such deviations, and should transmit the results of such reviews to the Organization;

2. That each State should take all necessary steps, through national FAL committees or other appropriate means, for
   a. regularly calling the attention of all interested departments of its government to the need for (i) making the national laws and regulations conform to the provisions of Annex 9 and (ii) working out satisfactory solutions of day-to-day problems in the Facilitation field; and
   b. taking the initiative in any follow-up action required and in proposing inter-governmental meetings with neighboring States on Facilitation matters whenever this will provide further facilitation;
3. That each State should encourage its aircraft operators, individually or through the associations to which they belong, to continue to co-operate intensively with their governments as regards (a) outlining the precise nature of Facilitation problems and offering suggested solutions therefor, (b) assisting in the day-to-day development of Facilitation procedures which will impose the least amount of restraint on air transport while at the same time ensuring adequate protection of national interests, and (c) advising and furnishing material in connection with studies on the Facilitation aspects of terminal installations and ground-stop time;
4. That aircraft operators should be urged, on their own account, to take such practical measures in the field of Facilitation, in addition to measures taken by governments, as might add to the effectiveness of government action in that field;
5. That each State should give attention to the proven advantages derived from participating in regional facilitation programs, such as the one developed by the European Civil Aviation Conference;
6. That the Council of the Organization should take the initiative in annually reviewing the status of implementation of Annex 9 and in indicating, to the extent practicable, the particular aspects which require further intensive work by States and their operators;
7. That the Council should give emphasis to the implementation of the Facilitation program, both at Headquarters and in the Regional Offices, by (a) making the services of the Secretariat available to governments for assistance on Facilitation matters on the spot, where desirable, and (b) having the Secretariat work with the United Nations and other specialized inter-governmental organizations on any action aimed at Facilitation in the wider fields of international transport, and participate in inter-governmental regional meetings, as well as in meetings of other international organizations, when such meetings are dealing with Facilitation problems;
8. That the Organization should provide sufficient manpower and resources to handle effectively the Facilitation work to be done both at Headquarters and in the Regional Offices.

b. *Article 29 in relation to the carriage in aircraft of certain documents and possible consequential amendments (Basic documentation A10-WP/26, EC/6)*

The Commission considered this matter on the basis of a specific proposal by the United Kingdom for amendment of Article 29(d) and deletion of

Article 34 of the Convention, so as to eliminate all reference to the Journey Log Book. It also considered pertinent factual background material, as well as recommendations by the Fourth Session of the Facilitation Division and the 1954 Conference on Coordination of Air Transport in Europe for more comprehensive amendments to Article 29. After considerable discussion, the Commission decided, by a vote of 16 to 15, with one abstention, not to recommend the amendment of Article 29(d) and consequent deletion of Article 34. At the same time the Commission believed that the Assembly could make a useful declaration on the matter and, after several alternatives had been developed by Working Groups, arrived at what it considered to be a satisfactory declaration.

The final relevant Resolution (A10-36) reads as follows:

Journey Log Book

WHEREAS Article 29 of the Chicago Convention states that every aircraft of a contracting State engaged in international navigation shall carry a journey log book; and

WHEREAS the material to be contained in such a journey log book is generally described in Article 34 as including particulars of the aircraft, its crew and of each journey, but the Organization has not to date prescribed any detailed form for the journey log book; and

WHEREAS the particulars described in Article 34 are included in the General Declaration referred to in Chapter 2 of Annex 9 to the Convention; and

WHEREAS in the interest of Facilitation it is the desire of States to simplify documentary requirements;

THE ASSEMBLY RESOLVES that the General Declaration, when prepared so as to contain all the information required by Article 34 with respect to the journey log book, may be considered by contracting States to be an acceptable form of journey log book; and the carriage and maintenance of the General Declaration under such circumstances may be considered to fulfill the purposes of Articles 29 and 34 with respect to the journey log book.

Program of work of ICAO in the Joint Support field, including:

a. *General progress and program:*

b. *Progress toward standardization and simplification of Agreements (Basic documentation A10-WP/27, EC/7, and Supplement)*

The Commission noted that an international meeting to simplify the existing Danish and Icelandic Joint Support Arrangements had already been convened by the Council for September 1956, and that the documentation for that meeting, including draft model Joint Support Arrangements, had recently been distributed.

The Commission also noted that any joint support action ultimately depended on the consent and willingness to pay of the States whose airlines used the facilities or services. Certain States expressed the hope that a greater degree of meeting of minds might be achieved in the near future so as to make possible a broadening of the joint support activities through development of new schemes. Certain States also believed that the Council should encourage the use of joint support as a means to this end. However, in view of the comprehensive resolution on Agenda Item 20 prepared by the Executive Committee, the Commission did not feel that it was incumbent on it to pass an additional resolution on this particular subject, and indeed was of the opinion that to do so might cause confusion.

The Commission does, however, as a result of its general review of ICAO's activities in the joint support field and of the standardization and simplification of joint support agreements, recommend that the Assembly take action.

c. *Authorization for the Secretary General to provide for various payments to aided States through limited use of the Working Capital Fund in certain defined circumstances (Basic documentation A10-WP/28, EC/8)*

The Commission noted that the pertinent provisions of the existing ICAO financial regulations (Doc. 7515) dealt only with Joint Financing projects in respect of which an arrangement for joint financing under Chapter XV of the Convention did not exist but "was expected." The Commission was of the opinion that there ought to be a provision for advancing funds on account of projects for which International Joint Financing Arrangements already existed, where the need for such advance arose from the fact that contributions of participating States were still awaited at the relevant time and the State responsible for the operation of the project was not in a position to defray the costs without such contributions.

The Commission accordingly, after a full basic discussion, decided to recommend to the Administrative Commission that: (a) The ICAO Financial Regulations (Doc. 7515) be amended to provide for the advance of funds from the Working Capital Fund in respect of expenditures covered by properly constituted International Joint Financing Arrangements, along the lines indicated in A10-WP/28, the actual text of the amendment to be developed by the Administrative Commission; and (b) the exact amount to be made available for this purpose be determined by the Administrative Commission, after due consideration of its effect upon the level of the Working Capital Fund of the Organization, but that the amount should not be less than $100,000 nor more than $200,000.

The final relevant Resolution (A10-37) reads as follows:

Program of Work of ICAO in the Joint Support Field

THE ASSEMBLY NOTES WITH APPROVAL the activities of ICAO in the Joint Support field and the progress being made towards the standardization and simplification of Joint Support agreements.

Statistical Activities of the Organization (Basic documentation A10-WP/29, EC/9)

The Commission noted the basic document on this subject submitted by the Council, approving without comment that part of it dealing with past activities. The future program appended to the document was also approved, and it was emphasized that contracting States regarded the existing statistical system as being in general both effective and useful. As the document showed, however, further improvement was clearly desirable in the filing of the statistics by contracting States, and the comments of a number of Delegates indicated that further efforts should be made to interpret and analyze the material received and to publish it more rapidly. It seemed desirable also that arrangements should be made for examining in detail the desirability and the practicability of extending the existing statistical system by the collection of additional material. In particular, a number of Delegates felt strongly that the collection of Origin and Destination statistics should be studied again to see whether an economical and effective method could not be devised for obtaining this data.

These considerations led to the suggestion that a program of closer cooperation and coordination between contracting States and the Secretariat

might be developed so that experts in governments with substantial statistical departments could help to solve the problems of those governments that were less developed in this respect and could also examine any part of ICAO's statistical machinery requiring improvement, including such problems as the collection of Origin and Destination statistics. It was felt that collaboration of this kind might be achieved by periodic meetings of the Statistics Division, by the establishment of a panel of statistical experts with whom the Secretariat might consult, and by providing some form of statistical advice of assistance to contracting States that needed it. It was emphasized that the Statistics Division should deal with the technical aspects of ICAO's statistical work and should, therefore, be attended by statistical experts, matters of policy having been determined by the Air Transport Committee and the Council. The financial arrangements for providing statistical advice and assistance to contracting States were not discussed in detail, but it was pointed out that in some instances a State receiving such assistance might be prepared to pay for it.

The final relevant Resolution (A10-38) reads as follows:

THE ASSEMBLY:

1. NOTES WITH APPROVAL the basic document on the statistical activities of the Organization, including the work program appended thereto, stressing the importance that it attaches to the review by the Secretariat, in accordance with the Council's instructions, of the problems of collecting origin and destination statistics mentioned in the work program;

2. URGES contracting States to ensure that meetings of the Statistics Division are, so far as possible, attended by statistical and accounting experts; and

3. DIRECTS the Council:
   a. To call Divisional or other meetings, as necessary, to examine the statistical problems of contracting States and ICAO in order to meet more effectively the needs of the Organization and to improve the uniformity of the statistics, the completeness and timeliness of reporting by States, the form and content of analyses and publications, and the speed of dissemination by the Organization, the initial meeting to be called at the earliest practicable date to examine the existing statistical system with these objectives in view and in the light of directives relative to the needs of the Organization and contracting States to be formulated by the Air Transport Committee and Council in consultation with contracting States;
   b. To establish a panel of statistical and accounting experts of States whom the Secretariat may consult at any time by correspondence or personal visits; and
   c. To make arrangements, on an appropriate basis, for assistance to be given upon request to contracting States by personnel of the Secretariat or of the panel, or designated by the Secretariat or the panel, for the improvement of their air transport statistics and their statistical reporting to the Organizations.

B. FINAL REPORT OF THE EXECUTIVE COMMITTEE

Among the items discussed by the Executive Committee were the following:

Relationship of ICAO with the European Civil Aviation Conference

The Committee had before it the basic documentation on the subject, A10-WP/9, EX/7.

In initiating the debate in the Committee, M. Nottet (Chief Delegate of Belgium) in his capacity of President of ECAC presented an oral statement tracing the developments since 1954 which led to the formation of ECAC. In the course of deciding on the status of the Conference, three alternatives had been considered: (i) complete independence of ICAO; (ii) complete integration with ICAO as a subsidiary body of the kind envisaged in Article 55(a) of the Convention; and (iii) a sort of intermediate status characterized by a close relationship with ICAO but also a considerable degree of autonomy. The third alternative was the formula eventually adopted by unanimity of the Conference. In Resolution I, the Conference declared its intention to maintain close liaison with ICAO and requested the continued provision of Secretariat service by ICAO, subject to the determination by this Assembly of the financial relationship between the two bodies. Finally M. Nottet expressed the hope that ICAO would be disposed to accept the kind of relationship suggested, and would continue to provide the necessary services.

In the discussion that followed, the attention of the Commitee was focused on two principal points, the organic relationship between ICAO and ECAC and the demarcation of financial responsibilities to defray cost of the work done in connection with the ECAC activity.

With respect to the former a large number of Delegations, including Argentina, Mexico, Italy, Canada, the United States, New Zealand, France, and others, manifested support to the so-called intermediate status of ECAC. Most Delegations believed that although ECAC was born of interest and of importance to international civil aviation and as such deserved collaboration and support from ICAO. There was no dissenting opinion on the continued provision of secretariat services by ICAO to ECAC.

A small minority, including the Delegations of Portugal, Austria, Denmark and Sweden, however, expressed some concern at the quasi-independent status of ECAC and indicated in no uncertain terms that they would have preferred to see it constituted as a regional air transport commission within the framework of the ICAO Convention — which, as its preamble clearly stated, had the objective of developing international civil aviation in every part of the world in a safe and orderly manner. The Delegate of Mexico insisted that the intermediate status of ECAC was entirely compatible with the Convention, since Article 83 expressly authorized Contracting States to make arrangements not inconsistent with the provisions of the Convention.

As to the question of financial responsibility for services to ECAC, there was general agreement in the Committee that direct costs incurred by ECAC should be borne by member States of ECAC, and indirect costs by ICAO. The only dissenting view was expressed by the Delegate of Czechoslovakia, who maintained that as the status of ECAC was similar to that of other organizations from which certain European States were excluded, and that not all the States of Europe — in fact, not all Contracting States in the region — had been invited to the Conference and as the meaning of the so-called intermediate status was obscure, he was in a position to favor the proposal that ECAC be given the kind of financial assistance envisaged in A10-WP/9 paras. 17-19.

At the close of the debate, the Committee approved a proposal by the Delegate of Mexico for the establishment of a working group, whose members, half from European States and half from non-European, would be appointed by the Chairman, to prepare a draft resolution on the relationship between the two organizations and the allocation between them of the costs incurred in connection with ECAC work, based on paragraphs 19 and 20 of A10-WP/9 but also taking into account the discussion of the Committee.

The Working Group subsequently appointed by the President consisted of Delegates from the following States: Belgium, France, Portugal, the United Kingdom, Sweden, the United States, India, Mexico, New Zeland and Pakistan; it held four meetings under the Chairmanship of Dr. E. M. Loaeza (Mexico), Mr. E. M. Weld acting as Secretary. The Group finally on July 6, 1956 presented to the Committee a draft resolution, A10-WP/111, EX/28, which after some discussion was put to a vote resulting in 38 affirmative votes, without opposition but with 11 abstentions. After the vote, M. Nottet, the President of ECAC, expressed his appreciation of the action taken by the Committee and gave assurance that the members of ECAC had every desire to give effect to the provisions of the Convention and a firm determination to reach agreements to promote air transport in Europe and hence contribute to the development of civil aviation of the world.

The final relevant Resolution (A10-5) reads as follows:

WHEREAS the Assembly notes:

1. That, at the instance of the Council of Europe and as a result of action by ICAO, 19 European States, presently members of ICAO, have constituted the European Civil Aviation Conference (ECAC) — whose constitution, objectives, and rules of procedure are set forth in ICAO Document 7676, ECAC/1 — with the particular purpose, among other things, of promoting the coordination and better utilization of intra-European air transport;
2. That ECAC has sought close liaison with ICAO in order, through regional cooperation, to help achieve the aims and objectives of ICAO as set forth in the Convention on International Civil Aviation;
3. That ECAC does not intend, at least at the outset, to establish a separate secretariat of its own, but desires the Council of ICAO to provide, to the extent practicable,
   (i) Secretariat services for studies, meetings (plenary meetings normally to take place annually) and other related activities, and
   (ii) Maintenance of records, correspondence and the like in the ICAO Paris Office;
4. That specific aspects of the relationship to be developed between ECAC and ICAO, at the request of the former, include consultation as to dates of and agenda for ECAC meetings, distribution of ECAC reports to the ICAO Council, performance by ICAO of various functions relating to ratifications, entry into force, adherences, denunciations, safekeeping, etc., of agreements on commercial rights and the like developed by ECAC and also the interchange of documentation and studies on technical aviation subjects;
5. That ICAO's work in the Joint Financing field under Chapter XV of the Convention has developed a practice under which the direct costs (such as travel, subsistence, cost of accommodations and supplies at meetings, cost of temporary personnel engaged for meetings, etc.) are charged to the States participating in the particular project involved; and indirect costs (such as salaries of the regular ICAO

staff, research and production of advance documentation at headquarters, etc.) are borne by ICAO;

and further notes that the work program of ECAC is consistent with, and should usefully complement, the work that ICAO is pursuing in the air transport field, particularly along the line laid down by Assembly Resolution A7-15 and 16, and is in furtherance of the objectives of ICAO as defined in the Convention;

THE ASSEMBLY RESOLVES:

1. To assume, on behalf of ICAO, the responsibilities that will devolve upon the Organization as a result of acceding to the request of ECAC, and to declare ICAO's readiness to maintain, for its part, the close liaison proposed by ECAC;
2. To direct the Council to provide, always taking into account the over-all work load of the ICAO Secretariat, the secretariat and other services requested by ECAC to the extent necessary for its proper functioning;
3. That indirect costs attributable to the ECAC activity hereunder shall be borne by ICAO;
4. That the direct costs attributable to the ECAC activity shall be the responsibility of the member States of ECAC, but may be advanced by ICAO, in which event they shall be recovered from the member States of ECAC in such proportions as may be agreed upon by such States within the framework of ECAC.

Future Frequency of Assembly Sessions

The Committee discussed the subject on the basis of the supporting paper A10-WP/3, EX/1 and Addendum, in which was presented, *inter alia*, the information that 38 Contracting States had now deposited instruments of ratification of the Protocol embodying amendments to Articles 48(a), 49(e) and 61 of the Convention, which were adopted by the 1954 Assembly. Only four more ratifications were required to bring these amendments into effect.

All delegates who spoke agreed that annual sessions of the Assembly could in the near future be dispensed with; opinions, however, differed on the question of the proper interval between sessions. While two Delegates, those of the United Kingdom and the Netherlands, expressed a preference for triennial sessions, other delegations including those of France, Italy, Nicaragua and Czechoslovakia considered the biennial arrangement a more appropriate choice. Arguments advanced in support of the biennial system included that too long an interval between Assembly sessions would run the risk of lessening the interest of States — particularly non-Council member States — in the Organization and that the triennial arrangement would not afford sufficiently frequent opportunities for Contracting States to maintain contracts with the Organization or to pass judgment on the activities of the Council. As, however, the biennial arrangement of Assembly sessions might entail an amendment of Article 50(a) of the Convention relating to the term of office of Council, its advocates were willing to accept for a trial period, the Council's recommendation of a major session in 1959 and a limited session in 1957 or 1958 if found necessary, though two of them emphasized that their support was conditional upon the continuance of the working methods followed by the Council during the past several years and the maintenance of the present distribution of responsibilities between the Council and the Assembly.

The consensus of views of the Committee finally crystallized around a draft resolution submitted by the French Delegation declaring that the

Assembly refrained from adopting at this time any definite policy on the frequency of Assembly sessions and requesting the Council to convene, during the forthcoming three-year period, an Assembly session in 1959 for a general review of ICAO activities and for election of the Council and another session either in 1957 or 1958 and to prepare the agenda for that session as appropriate. Commenting on the text of the draft resolution, some delegates saw no need for the distinction between major and limited or administrative sessions of the Assembly; the preparation of the Agenda for the Assembly being the specific responsibility of the Council in accordance with Rule 10 of the Standing Rules of Procedure of the Assembly.

After further discussion on points of drafting, the Committee accepted the motion of the Delegation of the United Kingdom to take a vote on the substantive issue:

> "Will the Committee recommend to the Plenary that there should be an Assembly session either in 1957 or in 1958."

The result was 41 in favor, none opposed and two abstentions.

The final relevant Resolution (A10-13) reads as follows:

WHEREAS thirty-eight contracting States have now deposited instruments of ratification of the protocol embodying amendments to Articles 48(a), 49(e) and 61 of the Convention and it is therefore expected that the said amendments will come into force in the near future, thus dispensing with the requirement for holding annual sessions of the Assembly;

THE ASSEMBLY,

Refraining from adopting at this time any definitive policy regarding the frequency of Assembly sessions,

RESOLVES that for the forthcoming three-year period the Council be requested to convene an Assembly session in 1959 and another session either in 1957 or in 1958.

C. ICAO "JET AGE TASK FORCE" SEES URGENT NEED FOR IMPROVEMENT IN NORTH ATLANTIC REGION AIR TRAFFIC CONTROL AND COMMUNICATIONS

The International Civil Aviation Organization made public on January 9, 1957 the conclusion of its special panel of aeronautical authorities that "the world's outstanding case of immediate and compelling need for aviation improvement relates to air traffic control and communications in the North Atlantic Region . . . The enormous volume of air traffic is already suffering difficulties, delays and forced acceptance of undesirable conditions of operation which will grow worse with continuing expansion of air traffic until remedies for some of the fundamental causes of the present troubles are agreed upon and applied . . . Without collective action by all the governments whose airlines fly the Atlantic, the development of North Atlantic air traffic will be more and more handicapped as the traffic continues to grow."

The Panel was appointed by the ICAO Council upon request of the Tenth Session of the ICAO Assembly held in Caracas in June 1956, to consider what improvements in air navigation services and facilities will be most necessary during the next five years. Dr. Edward Warner is Chairman, members are Colonel Luis de Azcárraga of Spain, Colonel Helio Costa of Brazil, A. P. Dekker of The Netherlands, Jerome Lederer of the United States of America, René Lemaire of France, and Air Vice Marshall Sir Victor Tait of the United Kingdom.

The Panel found that the North Atlantic not only has by far the heaviest transoceanic traffic in the world, but one of the heaviest of all international routes; year after year there have been consistently large increases in the

number of civil flights over the region. Analysis of transatlantic flights made during the summer of 1956 shows that more than half of these flights suffered substantial difficulties originating in communications or air traffic services. Forty per cent of the flights were unable to fly at the altitudes they had requested, or had to change their flight plans after departure because of air traffic control instructions, while twenty per cent were delayed on the ground awaiting air traffic control clearance. One-quarter of the flights reporting on congestion of air-ground communications circuits experienced delays averaging fifteen minutes because of this congestion; fifteen per cent of those flights reporting on air-ground communications failures due to radio propagation disturbances were unable to communicate with any ground station for periods of between one and two hours, and six per cent more for periods of less than one hour. Because of these communications failures, forty-four search and rescue alerts on civil aircraft were declared in the Gander Control Area during the period from June to August of 1956; the aircraft for whom these alerts were called were not in trouble, but a search and rescue alert is called after an aircraft has been unable to communicate with the air traffic control center for a certain length of time.

The Special Implementation Panel, noting that "the main causes underlying the difficulties are unreliable fixed communications among Gander, Greenland, Iceland and Shannon/Prestwick, unreliable and congested air-ground communications, and inadequate position-fixing by aircraft in flight, mad the following recommendations for improvement:

1. A technique for point-to-point radio communications, called "VHF Forward Scatter," appears to hold much promise, as it is not subject to the blackouts that afflict the high frequencies now used . . . ICAO member states should consider the financial aspects of providing the system, including that of joint financing of the Iceland and Greenland stations . . . If technical evaluation supports the establishment of this circuit, everything possible should be done to have it operating by the summer of 1958. (The Forward Scatter technique has been under development for the past few years; it operates on frequencies in the 30 to 60 megacycles/second band and depends upon the ability of the ionosphere to scatter radiated energy of these frequencies so that a minute amount of this energy will reach distances of a thousand miles or more.)

2. As a matter of urgency, tests should be pressed forward with a view to incorporating additional ground wave radio stations in the North Atlantic regional plan at locations where they will assist substantially in maintaining air-ground communications. (Ground wave communications, which is conducted on frequencies in the region of 3 mc/s from stations as close as possible to the edge of the sea, is not disrupted by the propagation disturbances which are present in the auroral zone.)

3. States concerned should give every support to any Consol installation plan that results from action of the ICAO Air Navigation Commission. (Consol is a type of long range radio beacon station used for position-fixing by aircraft in flight. Consol stations are in operation in Western Europe and in the United States, but gaps exist in the Consol chain across the North Atlantic.)

The Panel also recommended that the states of the North Atlantic region should examine the extent to which recommendations of a Special North Atlantic Regional meeting held last year are being followed or implemented, and that they should report any difficulties fully and promptly to ICAO.

ICAO IMPLEMENTATION PANEL MEETING IN EUROPE

During their January meeting the Panel found that so far as present services are concerned the situation is generally satisfactory throughout

most of northern and western Europe. In much of southern Europe and in countries bordering the eastern Mediterranean, the provision of facilities and services has not reached so high a degree of completion as in the rest of the region, and special efforts may be necessary in some countries.

One service requiring such improvement is that of communications between ground stations. The efficient operation of any system of air route is dependent to a large degree on the speed with which messages concerning flights can be passed from one point to another on the ground. As in other regions of the world, the countries comprising the European-Mediterranean Region have organized a network of communications circuits for passing such messages. The Panel found that in some parts of the network it is important that the time taken for these messages to reach their destination be reduced, and recommended measures to be taken toward improving the organization of communications stations and the training of personnel.

Another matter to which the Panel gave its attention was the provision of a more complete network of upper air observations stations in southern Europe and the Mediterranean area. Such stations send up balloons at intervals of a few hours, carrying lightweight instruments and transmitting equipment for automatically reporting the weather conditions at the various altitudes through which the balloons pass, up to extreme heights of 15 or 20 Km. The winds encountered are also determined by tracking the balloon movements by radio or radar. The data thus collected are used by meteorologists to provide pilots with forecasts of the weather and wind conditions along the routes they are flying. The establishment of an adequate network of such stations is of the utmost importance to present-day air transport operations, and will be of even greater significance when new high speed, high altitude jet transport aircraft are introduced on Euorpean air routes. The Panel expects to consult with individual governments on the need for filling the most vital gaps in the present network.

On a more general subject, the Panel saw a need for maintaining a uniformly high standard in the training of personnel to maintain and operate the air traffic control and communications services in Europe. There is a requirement also for keeping trained personnel of States having limited technical resources up-to-date in their fields, and suitable refresher courses for such personnel may be helpful.

The demands of modern high speed aircraft, and the even more advanced aircraft now under construction, make it necessary that the existing ICAO plans for European aerodrome and airway development, and for communications, meteorological, and air traffic control services should be reviewed and brought up-to-date. A complete review will be made at a regional meeting that ICAO will hold during the coming summer. The Panel urged that governments attending the meeting will maintain a regional approach to their task, to produce an integrated plan for Europe as a whole.

South American and Caribbean Areas

Further meetings of the Panel have recently been held in Lima (Peru) and Mexico City, the regions covered on these occasions being the South American and the Caribbean areas. If there is any outstanding information in regard to these meetings, it will be reported in the next issue.

II. INTERNATIONAL AIR TRANSPORT ASSOCIATION

FACILITATION ADVISORY GROUP

Representatives of the world's scheduled airlines met in Madrid, January 22-25, 1957, to find ways to eliminate the red tape, created by customs and other authorities, which hampers the movement of passengers and cargo

by air. Officials of the Spanish Government and members of the International Civil Aviation Organization attended the meeting as observers.

With hundreds of millions of dollars being invested in new types of aircraft on order for the jet age with its emphasis on speed, airlines and governments know that when travel time is cut in half, the time spent on the ground must be reduced. If existing formalities remain unchanged, the group feared passengers would be spending more time on the ground than they would in the air.

The Facilitation Group discussed various questions which they felt might usefully be raised at the European Civil Aviation Conference meeting to be held in Madrid on April 28, 1957, *i.e.*, the simplification of aircraft documentation, passenger baggage examination, immigration forms, public health procedures, etc. It was felt that this meeting might provide an opportunity to initiate Facilitation measures in Europe which might not be so readily implemented in other parts of the world.

III. INTERNATIONAL CHAMBER OF COMMERCE

GENERAL TRANSPORT COMMISSION

Taxation of Air and Sea Transport

At the meeting of the General Transport Commission, to be held on March 28, 1957, the following Draft Resolution will be placed before the meeting:

The International Chamber of Commerce considers that there is a marked tendency towards introduction and increase of taxes levied on the gross receipts from international transportation. For this purpose, taxes on gross receipts shall mean the taxes that are assessed on and are basically variable with the moneys received as payment for the performance of international transportation services (as distinct from charges levied for specific services rendered other than international transport) and that are collected either because of the mere fact of the receipt of such moneys or because of the actual performance of the international transport.

Such taxes on international transport materially increase its cost, cause inconveniences to travellers and shippers as well as entrepreneurs and thus hamper international traffic and trade.

Such taxation is contrary to the several fiscal incentives as instituted in many legislations for the purpose of encouraging international trade and reduces the benefits to be derived by reciprocal exemption from income tax on profits of international transport.

The International Civil Aviation Organization during the session of its Council on October 4th, 1951, adopted a recomemndation to governments to eliminate or reduce to the greatest possible extent the taxes on the sale and use of air transportation.

Along this line the ICC recommends that the taxation of gross receipts from international transportation be eliminated and that no refusal of exemption from taxation should be founded on the absence of reciprocal services.

IV. INTERNATIONAL LAW ASSOCIATION

47th CONFERENCE

Apart from other subjects, three papers on international air law were read and discussed during the meeting which was held in Dubrovnic, August-September, 1956. The first, prepared by Maître Garnault, related to the question of execution of judgment in cases arising under aviation conven-

tions. The second, by Dean Chauveau, dealt with the question of the establishment of a system of international forum in appeals cases, to deal with matters arising out of international air law conventions. A sub-committee was appointed to examine the matter further and to report to the Association. The subjects dealt with by both these papers are included in Part B of the Work Program of the Legal Committee of ICAO.

The third paper, by Professor Goedhuis, was on the question of air sovereignty on which the following resolution was approved by the Association:

"THE INTERNATIONAL LAW ASSOCIATION,

considering the highly important role international aviation can play in a balanced growth of world economy resulting in raising living standards all over the world, considering that through the increase of general prosperity the chances of peace are being furthered, recommends:

I. That States which have not as yet signed the International Air Services Transit Agreement do so without undue delay.

II. That in question regarding the granting of commercial landing rights to foreign operators the States let themselves be guided by the basic principle that the social and economic needs of the individual are served by having at his disposal the most extensive international air communications possible;

and that, therefore, apart from specific national interests there is a common interest in expanding those communications upon which greater emphasis than heretofore should be laid;

Furthermore, that in granting such landing rights the principle of non-discrimination which is at the basis of the Chicago Convention should be strictly adhered to."

III. That the Air Law Committee continues the study of the nature and contents of air sovereignty paying special attention to the problems connected with coming flight in the outer space and the legal nature of interplanetary space.

During the discussion that preceded adoption of the resolution, the ICAO Representative urged full support of the views expressed in Part I and, on Part II indicated that the most appropriate action would be for the governments and the experts concerned to continue their efforts toward obtaining as much general agreement as possible amongst States on the economic aspects of the question which presented many complexities.

The exchange of views that had taken place during the ICAO Assembly in Caracas on the problems of "outer space" was also drawn to the attention of the meeting.

V. INTERNATIONAL INSTITUTE FOR THE UNIFICATION OF PRIVATE LAW

CONFERENCE OF SPECIALIZED ORGANIZATIONS CONCERNED WITH THE UNIFICATION OF LAWS

The purpose of the meeting which was held in Barceloma, September 17-20, 1956, was to consider the methods employed by various organizations concerned with the unification of law. Though no specific decisions were taken as a result of the discussions — these being rather in the nature of an interchange of views between those represented at this preliminary meeting — certain conclusions were reached in principle regarding the procedure to be followed, as for instance, on the need to have control *in loco*

with the corresponding branches and lawyers of other countries, sending of questionnaires, and co-ordinated research by the staff of the international organizations.

It was considered also that though the methods of unification might vary in each case, there are, however, certain problems within the different fields of law that, as regards unification, present a common character. Several delegates stressed the need that the international organizations concerned meet from time to time in order to take advantage of their experience, to interchange their programs on this subject and to study the more urgent questions of common interest. A resolution incorporating these views was adopted by the meeting.

VI. COMMITTEE ON EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS OF THE UNITED NATIONS

The second meeting of the above Committee was held in Geneva between August 16-September 12, 1956.

The Committee's original report was finalised in the form of revised recommendations, and it took into account the comments made by governments and other organizations. The report makes recommendations on classifications, definitions, and listing of dangerous goods, labeling and shipping papers and the arrangements recommended for keeping these up-to-date. Packaging requirements, however, are not specified.

The Committee recommended the formation of a permanent small governmental central body or committee in the United Nations to be responsible for the following:

a. To keep up-to-date and complete the list of dangerous goods;
b. To prepare a system of code numbers for such goods, and to allot the code numbers;
c. To pursue the task of standardizing regulations governing packaging and performance tests (and drawing the appropriate conclusions as regards labeling); and
d. To study any other related matters.

The final report will be addressed by the United States Nations Transport Commission to governments and international organizations as recommendations only. The appropriate preamble reads:

> "They do not constitute new regulations which it is proposed to substitute for national and international regulations governing the various means of transport. They simply represent a framework broad and flexible enough to allow those regulations to be easily fitted into it and so develop, while complying with the special requirements they have to meet. The adoption of this framework should make it possible to achieve a minimum of uniformity at the world level for the various means of transport. That uniformity may—and it is desirable that it should—grow and expand when the administrations and organizations responsible for the regulations have been able to exchange experience on this common basis."

JUDICIAL AND REGULATORY DECISIONS

EMINENT DOMAIN — VALUATION IN PARTIAL-TAKING CASES

WHEN the federal government condemns air space over private property adjacent to an air base, thereby acquiring only the legal right to keep the space clear of obstacles and structures, the question arises whether the assessors of just compensation[1] may, in addition to awarding damages for the actual easement taken and damages to the remainder caused by the taking of the easement, consider also the diminution in value of the remaining property caused by anticipated aircraft flight over the property.

In two recent condemnation cases,[2] the declaration of taking[3] described easements above the "glide angle plane" which extended outward from the ends of airport runways and over certain privately owned property. The "glide angle plane" was described in both cases as an imaginary line serving as a ceiling over the land above which obstructions or structures would not be permitted to extend.

The government contended that in acquiring the right to prevent the landowners from erecting structures which would rise above the "glide angle plane," it did not also acquire easement rights to fly aircraft over the land of the condemnees. Compensation for the easement taken, the government argued, should be computed by determining the value of the property before the easements were taken, and the value immediately thereafter, the difference being the compensation to be paid to the condemnee. The government urged that this "after" value be based on the effect produced on the remaining property by the actual easement taken, without considering damages from illegal or unauthorized use of the easement. This reasoning would exclude damages from anticipated flights over the property, presumably on the theory that the negative easement acquired by the government was limited to keeping a designated air space clear of obstructions, and did not give the condemner the affirmative right to fly aircraft through this space.[4]

The landowners replied that the government at the time of the eminent domain proceedings was flying aircraft at low altitudes over the property, that it would continue to do so, and that the purpose of the easement was to facilitate future flights. Therefore, compensation should be assessed on the basis of the present and potential use of the easements for aircraft flight purposes, in relation to the effect of such use on the real estate value of the remaining property.

In *United States v. 4.43 Acres of Land*,[5] the Texas federal district court held that damages may be awarded only for the actual easement taken in the declaration of taking. Hence, where the only easement condemned is the right to remove and prevent an obstruction from extending into or above the "glide angle plane," damages awarded may not include diminution in real estate value resulting or likely to result from flights of aircraft over such property. The court said that the compensation should reflect the value of condemnee's property after the taking based on the "obstruction" easement and nothing more.[6]

A different approach to the valuation problem is illustrated by the decision of a New York federal district court in *United States v. 48.10 Acres of Land*.[7] The court ruled that any loss or depreciation in real estate value caused by anticipated aircraft flight had to do with the future and could

See pages 107-112 for footnotes.

not be considered in the assessment of compensation.[8] With apparent inconsistency, however, the court stated in its valuation formula that the test was whether a prospective purchaser would pay the price which he otherwise would have paid if no easement existed, such price to be determined from an appraisal of the property's fair market value.[9] It is submitted that this theory in fact contemplates the expressly excluded aircraft damages. The decision, in effect, indicates that, while compensation must be gauged by the effect of the actual easement acquired on the remainder, this effect should be measured by the reaction of the market to the presence of the easement and not by an artificial standard that may be legalistically correct but realistically unjust.[10]

These two cases, while presenting substantially similar fact situations, offer divergent treatment of the valuation problem. If federal district courts in the future follow the fairly restrictive decision of the Texas court, many legitimate claims to compensation will be exposed to dissipation in the uncertainties attendant to statutory action, where the latter course is pursued after the eminent domain suit. Assuming that the real estate value of condemnee's land has been deflated by anticipated aircraft flight, but that he has been compensated merely for the value of the "obstruction" easement, the dissatisfied condemnee may seek recognition and satisfaction of his claim in tort under the Federal Tort Claims Act or in implied contract under the Tucker Act.[11]

However, even if the claimant pursues his statutory remedies, he may be deprived of relief by the application of "*res judicata.*" Thus, a court may feel that the amount of compensation for damages to the remainder was or should have been determined in the original eminent domain proceeding, and that the damage for which the claimant now sues was in fact caused by the authorized use to which the easement was put. Under this view, the present suit would be held not to constitute a new cause of action, and therefore. would be barred by *res judicata.*[12] If the court decides that the condemnee's allegations amount to a new cause of action, it might then hold that the judgment in eminent domain was conclusive only as to the award for the value of the "obstruction" easement. Although collateral estoppel would preclude further consideration of the "obstruction" easement issue, *res judicata* would not apply to prevent the claimant from recovering the drop in market value resulting from the influence of aircraft flights on the remainder. Clearly, however, this latter possibility is dependent on the court's finding of a cause of action distinct from that on which the earlier award to the landowner was based.[13]

If he is successful in establishing the separate cause of action, the owner must still convince the court that he has suffered actionable damages, *i.e.*, damages above and beyond those compensated for in eminent domain. He may find this very difficult. There is no binding obligation on the government to pay for property merely because it is damaged. Before there can be recovery, the property must be so severely damaged as to be "taken" in the constitutional sense.[14] While the flight of aircraft might materially lessen the fair market value of the property, such activity might not amount to a compensable taking.[15] Before a compensable taking can be found, there must be proved some actual physical damage impairing the utility of the land.[16] The unfortunate situation may materialize in which aircraft do not pass over the owner's land to a degree sufficient to justify compensation on the basis of a taking or on a theory of trespass, and yet the mere likelihood of such flight, where a negative easement has been taken, may result in a substantial decrease in the value of the land in the eyes of the market.

If the condemnee is successful in proving the existence of actionable damages, he is entitled theoretically to recover an amount equal to the harm

suffered. The court may allow a lump sum payment to cover all the claimant's losses, varying according to the degree of harm suffered. Where it is apparent that the flights have already damaged the property and that they will continue to do so, damages may be awarded for past and prospective future invasions of the land.[17] If the interference is deemed temporary, however, the court may limit compensation to a specific period of time, perforce casting the burden and expense of periodic suits on the landowner who finds that the statutory award does not represent his actual damage.

There is also a hazard from the standpoint of the government, *i.e.*, it may be compelled to pay twice for the same taking if the condemnee pursues his statutory remedy to a successful conclusion. It is possible that the award made in the statutory suit will be so large, in relation to the degree of harm actually suffered, as to include in fact the eminent domain award. It should be remembered that a variety of elements must be considered in determining damages; courts have a tendency to rely heavily on expert testimony, much of which is often slanted in favor of the property owner's interests.[18] Although it is possible that an excessive award may be scaled down or rejected by a reviewing court,[19] in federal courts, where the assessment of compensation may be made by a commission, the commission's report will not be rejected unless the trial judge considers it "clearly erroneous."[20] It is submitted that, in the light of past practice, the danger to the government of double liability in these circumstances, is real and substantial.[21]

The holding in *United States v. 4.43 Acres of Land* opens the door to further litigation of claims that should have been disposed of in the eminent domain proceeding. By a more realistic approach to the valuation problem, the Texas federal district court could have avoided the narrow decision it reached and thus could have obviated to an appreciable extent this threat of future litigation. The court did not dispute the generally accepted rule in partial-taking cases—cases in which the condemner does not take the fee but only a part thereof—that the condemner must pay compensation not only for what he has taken, but also for damages to or diminution in the market value of the remainder caused by the taking and authorized use of the easement.[22] By a strict reliance on the terms of the declaration of taking, however, the court was led to a technical decision. The court held that the government acquired title only to the exact easement described in the declaration, and that the court is powerless to enlarge the easement or rights which the government has condemned and acquired therein. The court concluded that the diminution in value of the remainder caused by the taking of the easement, must be computed on the basis of the *legal* use to which the easement taken could be put, and that being merely the right to keep the air space free of obstructions above the "glide angle plane."[23] The court apparently was impressed by the fact that the government did not acquire the affirmative right to fly aircraft through the easement, and so held that potential aircraft flight could not be an element in the valuation problem. While the court in *United States v. 48.10 Acres* employed a more liberal recovery theory, it agreed in principle with the Texas court that damages from future flights were not in issue and hence not includible in valuation. That principle is questionable.

The declaration of taking described an easement giving the government the right to prevent obstructions from protruding above the "glide angle plane." The seemingly obvious fact that the purpose of the easement was to facilitate air traffic was not referred to in the declaration. The assessors of compensation, in the Texas case, were limited in their consideration to the most damaging use of the easement that the taker would have the legal right to make, this legal right being determined by a liberal construction of the declaration of taking. The assessors were not permitted to consider the

actual damages that would ensue due to the close relation of the functional purposes of the easement to the operation of the air base.

A more realistic approach would be to base the government's liability on the easement's maximum use. On the facts of the *4.43 Acres* case, this might have been accomplished by requiring the government to amend its complaint to specify the use to which the taken easement is to be put.[24] In the absence of such amendment, however, the effect of the decision could still have been avoided by ruling that the scope of the rights acquired is limited to clearance, but that the maximum use of such rights is to abet imminent air traffic. Indeed, logically it could be said that the easement was acquired for "necessary purposes" connected with flights from the adjacent air base.[25]

Such a rationale does not violate the proposition relied on in the Texas case that a court may not enlarge rights acquired in the declaration of taking. In saying that the government acquired rights to effectuate a particular purpose or function, the rights themselves are left untouched. The direct relation between the actual easement acquired and the air base is implied in the declaration, and from the standpoint of property valuation, is not severable.[26]

As long as the government continues to acquire avigation easements without specifying their basic utility for aircraft purposes, the issue of assessing just compensation in such circumstances will have to be faced by the courts, and conceivably many legitimate claims will suffer in the process. It is desirable, therefore, that a uniform formula of assessment be adopted by the federal courts in these cases which will eliminate superfluous litigation and define and protect the rights of the parties concerned. It is submitted that such a formula is in existence, although it has been sparingly used. The formula requires that damages to the remainder be included in the value of the part taken.[27] Perhaps the chief virtue of the formula lies in the fact that it can be used to reflect the *market reaction* to the partial-taking, which should form the basis of the compensation assessment.

Any formula, if used wisely in a given instance, may result in an acceptable determination. The problem, however, is to find that valuation theory which is the most adaptable to a systematic, uniform application by the courts. The "before and after" test, mentioned in connection with the *4.43 Acres* case, has received favorable comment from an eminent authority in the eminent domain field.[28] In practice, however, it has been confused frequently with other less desirable formulas, with a corresponding lack of consistency among the decisions in which the "before and after" test has been used.[29]

Concededly, the "damages to the remainder included in the value taken" formula is also subject to misapplication. Using it, the Texas district court could have reached the same decision it did. The fault lies not with the formula, but with the court applying it. However, the suggested test eliminates the conditions which often have resulted in awards out of all proportion to the actual damage suffered.[30] Furthermore, when used on the basis of market reaction to the easement in avigation easement cases, it will enable courts to lay the foundation for determination of awards which will be more truly reflective of the interests of the condemnee. Other, more popular valuation theories have been used extensively with a great deal of confusion as the result. Certainly, therefore, in the interests of uniformity and justice, the courts in the future should give the most serious consideration to the "damages to the remainder included in the value taken" test in partial-taking cases.

ARTHUR R. BULLER

FOOTNOTES

[1] The fifth amendment provides that "private property shall not be taken for public use without just compensation." U.S. Const. amend. V.

[2] United States v. 48.10 Acres of Land, 144 F. Supp. 258 (S.D.N.Y. 1956); United States v. 4.43 Acres of Land, 137 F. Supp. 567 (N.D. Tex. 1956).

[3] 46 Stat. 1421 (1931), 40 U.S.C. §§ 258a-e (1952). The Declaration of Taking Act provides that in any proceeding brought by the government for the acquisition of any land or easement for the public use, the condemner may file with the complaint, or at any time before judgment, a declaration of taking, declaring that the lands described are taken for the use of the United States. It is imperative that the declaration allege the specific public use for which the land is being taken, together with a sufficient identification of the lands and a statement of the estate or interest in said lands taken. The condemner must also state the sum of money estimated by it to be just compensation for the lands taken. Upon the completion of this procedure, the act vests in the government both title and possession to the condemned property, although litigation may continue as to the final amount of the compensation and its distribution. United States v. .8677 Acre of Land, 42 F. Supp. 91 (E.D.S.C. 1941).

The Declaration of Taking Act is a supplementary condemnation statute permissive in nature and designed to vest title to the described condemned property in the United States immediately upon the filing of a deposit in court, pending the condemnation proceedings. It also gives the condemnee an immediate right to have his compensation determined in the same proceeding. If the condemnee's title is clear, he will be given an immediate cash payment to the extent of the government's estimate of the value of the property. United States v. Miller, 317 U.S. 369 (1943). However, since just compensation is determined as a judicial function, the amount deposited in conformance to the act may be increased or diminished upon final judgment. United States v. Catlin, 142 F.2d 781 (7th Cir. 1944). Upon filing the declaration and making the deposit, the government becomes irrevocably bound to pay the ultimate award regardless of whether or not the award is within the prescribed limits. Hessel v. A. Smith & Co., 15 F. Supp. 953 (E.D. Ill. 1936).

If a district court refers the matter of compensation to a commission, the commissioners are to determine the amount based on the exact easement or estate condemned as described in the declaration of taking. Fed. R. Civ. P. 71A(h). Damages resulting from unauthorized use of the condemned land by the government, a use not sanctioned in the declaration of taking, whether expressed in terms of claims for damages or for just compensation for property taken, are claims against the United States, and as such may be asserted in the United States Court of Claims or in a federal district court under the Tucker Act, 28 U.S.C. § 1491 (1952); 28 U.S.C. § 1346 (1952), or in a district court under the Federal Tort Claims Act, 28 U.S.C. § 2671 (1952). But it would seem that such claims may not be asserted by way of counterclaim in a condemnation proceeding, since this would allow a suit against the United States in a manner and in a court in which the government has not consented to be sued. Oyster Shell Products Corp. v. United States, 197 F.2d 1022 (5th Cir. 1952); State Road Dept. of Florida v. United States, 166 F.2d 843 (5th Cir. 1948).

[4] The government conceded that under circumstances not presented in the *4.43 Acres* case, an appropriation of the condemnee's property by flights of low-flying aircraft might be compensable. But its theory was that prospective use of the superadjacent air space over the condemned property for aircraft flight was independent of the avigation easement acquired, and that damages resulting from the possible materialization of such aircraft rights did not flow from the taking of the easement.

The "obstruction" easement taken by the government is a negative easement in that it merely prohibits a certain activity by the condemnee; the acquisition of the legal right to fly aircraft over the condemnee's property would be an affirmative easement. In the cases under consideration, the government did not take an affirmative easement, and it would be improper to award damages on the basis of an affirmative easement unless such easement has in fact been taken. Moreover, a court can not award compensation on the assumption that the taking of a negative easement will be followed by the taking of an affirmative one. Insofar, therefore, as the government contended that damages could not be awarded for the taking of an affirmative right to fly aircraft over the owner's property, it was correct. The theory of this comment, however, is that in order to determine fairly the damages that flow from the taking of a negative easement (the "obstruction" easement) a proper valuation formula must consider the interrelation of the right to keep air space free of impediments and the complementary presence of an air base with its attendant air traffic. See text at note 25 *infra*.

[5] 137 F. Supp. 567 (N.D. Tex. 1956).

[6] The court expressed their unwillingness to allow the claim for damages for diminution in real estate value due to anticipated aircraft flights: ". . . If the

commissioners are allowed in determining the amount of just compensation to take into consideration past or probable future aircraft flights over the land of these condemnees, and in effect to compensate therefor, the government will be required to pay for something which it has not acquired, and for which it may be compelled to pay damages or just compensation in subsequent proceedings." 137 F. Supp. at 572.

[7] 144 F. Supp. 258 (S.D.N.Y. 1956).

[8] On this point, the opinion cited United States v. 4.43 Acres of Land, 137 F. Supp. 567 (N.D. Tex. 1956). The landowners had claimed damages from fear, noise, vibration and psychological effects, and for impairment of utility of the farm lands for residential development purposes, relying on United States v. Causby, 328 U.S. 256 (1946). The facts indicated that more than one year had passed since the easements were taken, and that the flights of aircraft which had transpired had not impaired the utility of the land for residential development. In the *4.43 Acres* case, there was similar evidence of present flights although it was held insufficient to amount to a taking. As to damage claims pertaining to noise, vibration, etc., it appears that the New York court rightfully excluded them. See United States v. 26.07 Acres of Land, 126 F. Supp. 374 (E.D.N.Y. 1954).

[9] The court added that where residential property is involved, there must be proof of a reasonably imminent demand and market, as of the date of the taking, citing Olson v. United States, 292 U.S. 246 (1934). Furthermore, the burden of proof in establishing damages suffered as the result of the imposition of the easement, rests on the owner, not on the government. Westchester County Park Comm. v. United States, 143 F.2d 688 (2d Cir.), *cert. denied*, 323 U.S. 726 (1944).

[10] The court reasoned that: "Where avigation easements are sought for land adjoining an air base, the land being farm land but situated in an area that is under development for residential purposes, the value should be determined by taking into consideration the limitation imposed on the use of the land in the future. Although there is no showing that the present utility of the land for farm purposes has been impaired by the easements, the marketability of the property may be impaired in the future if it is to be used for residential development purposes." 144 F. Supp. at 258.

The court commendably indicated that the loss in real estate value for residential purposes is to be computed by what price the remainder will bear if offered for sale. This view would seem impliedly to acknowledge that the market, *i.e.*, the willing purchaser, might be unfavorably impressed with the avigation easement in its relation to air traffic.

[11] 28 U.S.C. § 2671 (1952); 28 U.S.C. § 1491 (1952); 28 U.S.C. § 1346 (1952).

[12] The rule that a judgment bars future action between the same parties or their privies with respect to the same cause of action applies to judgments in eminent domain proceedings. Scheer v. Kansas-Nebraska Gas Co., 158 Neb. 668, 64 N.W.2d 333 (1954). It has been held in cases under the Tucker and Federal Tort Claims Acts, that an award of compensation in eminent domain proceedings is conclusive as to every matter which could have been included therein, whether or not it was in fact included. *E.g.*, South Carolina Pub. Serv. Authority v. 11,754 Acres of Land, 123 F.2d 738 (4th Cir. 1941).

[13] An interesting discussion of this problem is to be found in Schopflocher, *What is a Single Cause of Action for the Purpose of the Doctrine of Res Judicata?* 21 Ore. L. Rev. 319 (1942). It is said that courts have reached conflicting results even though professing to apply identical rules of law which the author feels is partially due to the vagueness of the term "cause of action." The article contends that these conflicting results can be explained only by the existence of two fundamental but conflicting policies:

> (1) A judgment is "properly a bar on principles of public policy, because the peace and order of society, the structure of our judicial system, and the principles of our government require that a matter once litigated should not again be drawn in question between the same parties or their privies." Freeman, Judgments 1318 (5th ed. 1925). This policy is based on the interests of the defendant, who "should not be twice vexed for the same cause" and on the interests of the public and the state, which bear the expense for the organization of courts, the access to which must be free from obstructions by multifarious suits.
>
> (2) On the other hand, there is a strong policy not to cut off substantive rights of a litigant by a struct application of the rules of procedure. "All procedure is merely a methodical means whereby the court reaches out to restore rights and remedy wrongs; it must never become more important than the purpose which it seeks to accomplish." Clark v. Kirby, 243 N.Y. 295, 153 N.E. 79 (1926).
>
> According to which of these policies is considered to be stronger,

> the theory of what constitutes a cause of action varies even in the same jurisdiction; as between various types of cases, precedents may determine the policy. *Id.* at 321.

Keeping in mind the fact that the landowner who sues under one of the permissive statutes ordinarily will be attempting to enlarge his earlier award in eminent domain, the following statement is significant:

> . . . [T]here is a fundamental difference between situations in which the plaintiff [landowner] sues after recovery and those in which he sues after defeat. If he sues after recovery, it may be that the facts which are added for the purpose of increasing the . . . recovery and are alleged to constitute a new cause of action have already affected the amount of the first recovery. It is a fundamental policy of the law not to permit double recovery. To carry out this policy the courts are prone to stretch the concept of cause of action when they rationalize the result. It would be dangerous to assume that the same courts would have applied the same concept of cause of action if the first action had been decided against the plaintiff for reasons material only to this first cause of action. *Id.* at 358.

Thus, where the landowner unsuccessfully claims aircraft damages to his property in the eminent domain proceeding, and then attempts to prosecute this claim further under statutory authority, it is quite conceivable that the court might decide that he has failed to establish a cause of action disinct from that on which he received the condemnation award. That, in fact, he was suing on the "identical accusation" forming the basis of the original award.

[14] Peabody v. United States, 231 U.S. 530 (1913) (The mere location of a battery of guns which had not been fired for more than eight years, and which the government had no intention of firing, except in case of war, held not an appropriation for military purposes of the land within their firing range).

[15] Some idea may be gained from the following decisions as to the degree of impairment necessary to constitute a compensable taking. Where the noise and glaring lights of planes landing at or leaving an airport leased to the United States interfered with the normal use of a neighboring farm as a chicken farm, there was held to be such a taking as to give the owner a constitutional right to compensation. United States v. Causby, 328 U.S. 256 (1946). A servitude imposed by the government on land adjoining its fort was held a taking within the law of eminent domain where the government repeatedly fired guns of the fort across the land and had established a fire control service there. Portsmouth Harbor Land & Hotel Co. v. United States, 260 U.S. 327 (1922). A corporation chartered by Congress to construct a tunnel and operate railway trains therein was held liable for damages in the suit of an individual whose property was so injured by smoke and gas forced from the tunnel as to amount to a taking of private property. Richards v. Washington Terminal Co., 233 U.S. 546 (1914).

[16] The degree of physical damage that must be proved by the residential property holder is difficult, if not impossible, to define. In the *Causby* case, *supra* note 15, where the property involved was a chicken farm, it was held that the effect produced on the chickens by the low-flying aircraft destroyed the utility of the property and hence was an actual physical damage to or unreasonable interference in the use of the property. Where residential property is involved, however, and no surface rights have been taken by the condemner, the path to success for the claimant suing for impairment of the utility of the property is thorny indeed.

The cases cited note 15 *supra*, indicate instances in which the landowner prevailed in his claims. The presence of noxious odors and active guns near residential property offer fairly obvious examples of actual physical interference in the use of the property. But where the damages complained of result from aircraft, the litigant faces added subtleties. See Hinman v. Pacific Air Transp. 84 F.2d 755 (9th Cir. 1936). The court in the *Hinman* case, applying the legal premise that the essence of the legal right of property is dominion over it, rejected the contention that the landowner has title to all space above his land ad infinitum, and held that he had rights only to such a height as is, or might become, useful to the enjoyment of his property. The court pointed out that any use of such space which is injurious to the land, or which is in fact an actual interference with the possession or beneficial use, would be a trespass for which the owner would have a remedy. However, the court continued, mere use of the space above the land by an airplane would not of itself constitute actionable trespass. In this regard, such grievances as discomfort from noise, vibration and other inconveniences of a similar character were discounted as a basis for a trespass claim. To maintain an action in trespass, the court concluded, the complainant must allege a case of actual and substantial damage, supported by facts and circumstances.

The question arises, might a diminution in the utility of the land for purposes of sale on the market constitute such an "actual and substantial" damage? It has been held that an interference with the value of private property may constitute

a "taking." City of Crookston v. Erickson, 244 Minn. 321, 69 N.W.2d 909 (1955); State v. Bentley, 231 Minn. 531, 45 N.W.2d 185 (1950). See also Burger v. St. Paul, 241 Minn. 285, 64 N.W.2d 73 (1954), in which the court remarked: ". . . [Statute] defines taking by condemnation proceedings in this state to include every interference, under the right of eminent domain, with the ownership, possession, enjoyment, or value of private property . . ."

Whether or not the particular court in which the condemnee brings suit will follow this reasoning, in the absence of a similar statute, is one of the risks facing the litigant who seeks statutory relief after failing to collect in the eminent domain proceeding.

Between the extremes of a taking and a mere annoyance, there is a twilight zone in which the landowner has few guiding standards. A court unimpressed with his evidence (assuming that the plaintiff has first succeeded in establishing a good cause of action) will find no more than a technical trespass and award nominal damages, or else reject the allegations in toto. ". . . [A]lthough a legal injury to plaintiff is proven, yet if the extent of the injury is not shown, nor evidence given from which it can be inferred, nominal damages only can be recovered." Murray v. Pannaci, 130 Fed. 529, 530 (3d Cir. 1904).

[17] Restatement, Torts § 930 (1939); McCormick, Damages § 127(2)(b) (1935).

[18] "The mere fact that the courts rely so completely on expert testimony need not be in itself a ground of criticism, but what makes it deplorable is that the courts often accept these estimates blindly because of their own inexperience with real estate valuation. . . . The tribunal's task is not made easier by the fact that perhaps the most important qualification of an expert witness from the point of view of the party employing him is his ability to evade questions and to conceal or gloss over facts that are disadvantageous to his employer's side of the case.

"A court or jury is . . . likely to make some arbitrary compromise, usually by splitting the difference between the respective estimates. This practice encourages fantastic claims by property owners' witnesses, and estimates, deliberately undercut, by condemners' appraisers. It puts a premium on perjury. . . . It is unfair to conservative appraisers who have a strong sense of their professional standing, and it places at a disadvantage those owners who set their claims at what they consider the actual market value, rather than at a figure that takes into account the possibility that the tribunal will split the difference between the respective estimates." 2 Orgel, Valuation Under Eminent Domain, § 247 at 262 (2d ed. 1953).

[19] Generally, however, the practice seems to be for the appellate courts to let condemnation decisions stand as long as the compensation allowed falls somewhere between the respective estimates of the various expert witnesses. One reason for this seems to be the great bulk of the condemnation records which appellate courts are not eager to peruse. This attitude "has led to the prevalent impression that the appellate courts will not reverse on questions of quantum. The latter impression is correct insofar as it implies that, within wide limits, the appellate courts will permit findings of the trial courts or commissioners to stand." 2 Orgel, Valuation Under Eminent Domain § 247 at 262-63 (2d ed. 1953).

[20] 6 Nichols, Eminent Domain § 27.3(2) at 341 (3d ed. 1953).

[21] Theoretically, of course, the final judgment in the original proceeding is *res judicata* with respect to the same cause of action in future proceedings, where the same parties are involved. Where the condemnee succeeds in enforcing his claim in a statutory action, the original award in respect of the "obstruction" easement therefor should be excluded from the assessment of compensation.

[22] "To say that such an owner would be compensated by paying only for the narrow strip actually appropriated, and leaving out of consideration the depreciation to the remaining land by the manner in which the part was taken, and the use to which it was put, would be a travesty upon justice." United States v. Grizzard, 219 U.S. 180, 185 (1911).

[23] Potential uses beyond the scope of the declaration of taking or such similar charter of taking may not be considered in awarding just compensation in the condemnation proceeding. Where the taker makes such use of the property beyond the scope of the instrument of taking, the condemnee will be entitled to additional compensation in a new action. Chicago & N.W. R.R. v. Milwaukee, R & K Elec. Co., 95 Wis. 561, 70 N.W. 678 (1897).

[24] United States v. Chicago B & Q RR., 90 F.2d 161 (7th Cir.), *cert. denied*, 302 U.S. 714 (1937). In this case, the government was required to make its petition more specific, to enable the landowner to determine and make proof of damage to the remainder of his property resulting from the uses to which the government intended to put the part actually taken. The government had condemned 1.6 acres of the railroad's tract for the purpose of constructing a lake. The railroad contended that the government was actually taking more than it had described in the declaration of taking, in that, due to the height of the dam to be constructed, more of

defendant's land would be flooded than the actual estate condemned. Subsequently, the government filed an additional complaint condemning the land for which damages were claimed. On review, the government protested that the trial court's action in effect had compelled it to accept and pay for more rights than it had asked. The appellate court admitted that this might be true but decided that the consolidation of suits was preferable in that duplication of damages, and the danger of multiplicity of suits would be avoided, as well as securing to the condemnee an opportunity to have adjudicated all damages suffered because of the intended use of the property taken.

In the *4.43 Acres* case, the government contended that if further damages were inflicted on the remainder of the property beyond the amount awarded for the actual easement taken, the condemnee would have the right to sue under one of the permissive statutes. In reference to the facility of this remedy, the appellate court in the *Chicago B & Q R.R.* case commented: ". . . [T]he appellee [landowner] proceeded on the theory that by virtue of the physical appropriation of the 1.6 acres, the government impliedly agreed to compensate appellee for all proximate damages to its remaining property occasioned by the construction and use of the dam, and that recovery therefore was authorized by the Tucker Act . . . that unless appellee presented all its claims for proximate damages to its remaining property at the time of the physical appropriation of the land it would be barred thereafter from recovering those omitted. Appellee's contentions in these respects are sound. . . . If appellee had not asked that the complaint in the first action be made more specific, or if it had not presented its claim in that action for damages to its remaining property, but had merely gone to award on the value of its interest in the . . . land, it might have been placed in a very embarrassing situation in its effort to recover damages to the remaining property on the theory of an implied contract, especially if the government had chosen not to file any subsequent petition (for an increase in the size of the original taking) and certainly it was not necessary for it to do so. The government contends that as a result of (the trial court's order) it was compelled to accept and pay for more rights than it asked. This objection is not tenable . . . because by filing, the government impliedly agreed to pay for all damages to the remaining property, proximately caused by the *use* of that which it had physically appropriated. Hence, it will be presumed to have demanded the right to cause the damage for which it was liable." (Emphasis supplied) 90 F.2d at 167.

It is interesting to note that the opinion cited the Tucker Act as authority for awarding the condemnee all damages resulting from the maximum use of the right acquired rather than upon its maximum intended use. It is not unreasonable to conclude, where the government condemns an "obstruction" easement, that the maximum intended use of the easement as defined by the declaration of taking is to keep the air space free of impediments, but that the maximum use will be to clear the way for air traffic.

The reviewing court in the *Chicago B & Q R.R.* case said that the government manifested a "legitimate" purpose to place the condemnee in the "very embarrassing" position of having to rely on the implied contract theory in a later proceeding and so take his chances that the judgment in the original eminent domain suit would not bar later recovery under the Tucker Act.

This purpose, while termed "legitimate," seems rather hard-boiled. The court had little difficulty in favoring the cause of the condemnee as it was of the opinion that all of the damages for which the government might be liable because of its maximum use of the property could be awarded in one action.

[25] Chicago, K. & N.R. Co. v. Van Cleave, 52 Kan. 665, 33 Pac. 472 (1894). Under the law of eminent domain, a railway had condemned a strip of the owner's property for a right-of-way, but its track had been constructed on land other than the condemnee's, but adjacent to it. The legal right acquired by the railway in the use of the strip was to construct embankments and certain pits along the side of the roadbed from which material would be taken for the embankments. The condemnee claimed damages due to the affect on his remainder of the operation of the railroad on the adjacent property, along with other damage claims not material here. In upholding the owner's position, the court held that the land had been taken "for necessary purposes connected with the construction and operation" of the road. The court commented that the condemner was not limited to the use of the one roadway already constructed on the adjacent property, but might, if it chose, construct tracks on the strip taken from the condemnee's land or move its line over onto such land.

The applicability of this reasoning to the case of the "obstruction" easement is impelling. Without the right of clearage, the functioning of the air base is subject to the theoretical hazard of the landowner's erecting a structure that would penetrate into the air space above the "glide angle plane." It could logically be asserted that the easement was taken "for necessary purposes connected with the operation" of the air base.

[26] Whether or not the intended use of an easement for a purpose less obvious than in the principal cases could figure in the determination of compensation, is not material to the problem under consideration.

[27] 1 Orgel, Valuation Under Eminent Domain § 49 at 232-34 (2d ed. 1953). The author explains the philosophy behind the rule in the following words: ". . . [A] court, if unwilling to concede any exception to the principle that compensation should be limited to property that is 'taken,' might nevertheless recognize claims for damages to remaining property by holding that the value of the part which is 'taken,' is a value based on the significance of this part to the owner's entire property. Such a holding . . . would be quite in accord with economic and accounting conceptions of 'value to a going concern.'"

In Louisiana Soc. for Prevention of Cruelty v. Board of Levee Commissioners, 143 La. 90, 78 So. 249 (1918), where the condemner of a plot of land for levee purposes cited the relevant provision in the state constitution requiring compensation only for the value of the property taken, the court held that although the condemnee could recover compensation only for the value of the part taken, such value should be measured by reference to the fall in value of the remainder resulting from the taking of a part. It is worth interjecting at this point, that the court did not limit the fall in value of the remainder by some "use" theory, in relation to the part taken.

Orgel suggests that the formula has failed to gain widespread employment because "its logical implications are so obvious that they would embarrass the courts in placing whatever limits they wish to place on the recovery for 'consequential damages' resulting from the taking of a specific property."

[28] 1 Orgel, Valuation Under Eminent Domain § 64 at 290 (2d ed. 1953). According to the author, the "before and after" rule, literally interpreted, would avoid the danger of double counting of damages and come closer to a true approximation of the actual damage suffered by the property holder.

[29] One of the "less desirable" formulas with which the "before and after" rule has been confused, is the "value plus damages" test. Briefly, the latter test in its operation requires two things: 1. that the part taken be valued by the price for which it could be sold separately, divorced from the whole; and 2. that the decrease in the sale price of the whole resulting from the taking of a part, also be measured. The objection to this rule, is that a jury too often will include as damages to the remainder a part of the same injury which it included in the value of the part taken. The result, in many cases, is an excessive damage award. Despite its literal meaning, the "before and after" test has been so frequently misconstrued in application with the "value plus damages" test, that its positive utility in future cases is open to question. *Id.* at 236, 238, 290-94.

[30] These conditions being the factors attendant to the process of assessing damage based on some theory of value of the part taken and damage to the remainder resulting from the taking. Perhaps the chief merit of the "damages to the remainder included in the value of the part taken" formula, in the interests of efficient, equitable disposition of condemnation suits, is that it does not require the prevailing practice of computing two sets of damages.

DIGEST OF RECENT CASES

JUDICIAL REVIEW OF CAB ORDER — "FINAL ORDER" REQUIRED — LIMITATION ON APPLICATION OF ASHBACKER RULE

Eastern Air Lines, Inc. v. CAB

5 CCH Aviation L. Rep. 17,126 (D.C. Cir. Dec. 6, 1956).

Eastern Air Lines had filed an application for an extension of one of its existing routes. In the interim between filing the application and the time it came on for prehearing conference, several other airlines had filed applications covering most of the United States. In order to expedite hearing these applications, the Board set up area hearings and consolidated for hearing and disposition all the pending applications within a particular area. Eastern then filed amendments to its application and moved in the alternative either that its original application be considered in a separate hearing or that its new amendments be consolidated into the proceedings. From a denial of these motions Eastern petitioned for review. In affirming the CAB's order, the United States Court of Appeals for the District of Columbia Circuit held that an order denying consolidation is not a "final order" and therefore cannot be reviewed. The order in this case did not foreclose consideration of Eastern's amendments in appropriate proceedings. Furthermore, although Eastern contended that since its amendments sought mutually exclusive routes, it was entitled to consolidation under the rule in *Ashbacker Radio Co. v. FCC,* the court held that there must be some limitations on the *Ashbacker* rule when applied to air routes. Otherwise, *Ashbacker* could be availed of for the sole purpose of tactical maneuvers, and unlimited application of that rule could translate any proceeding on an application for an isolated route segment into an examination of the entire national air-route structure. If the Board was not unreasonable in the limitation placed on the application of *Ashbacker,* a court should not interfere.

JURISDICTION — WRONGFUL DEATH ACTION FOR DEATH OCCURRING IN AIRSPACE OVER HIGH SEAS — FEDERAL DEATH ON THE HIGH SEAS ACT — WARSAW CONVENTION

Noel v. Linea Aeropostal Venezolana

5 CCH Aviation L. Rep. 17,125 (S.D.N.Y. Nov. 29, 1956).

The plaintiff's decedent had died while a passenger on one of defendant's aircraft which crashed into the ocean. Plaintiff's original complaint, as amended, alleged that the decedent had been killed when the plane on which he was a passenger crashed at sea, and asserted claims for damages based on both the Federal Death on the High Seas Act (41 Stat. 537, 46 U.S.C. §§ 761-767 (1952)) and the "Warsaw Convention." The United States District Court for the Southern District of New York, in dismissing the original complaint, held that the Federal Death on the High Seas Act gave the plaintiffs only a cause of action in admiralty, rather than a civil cause of action. Therefore, the court said, not only could there be no civil cause of action under the Federal Death on the High Seas Act, but neither could a suit be sustained under the Warsaw Convention. In their second amended complaint, plaintiffs alleged that their decedent's death occurred in the airspace over the ocean, and contended that this allegation placed their claim outside admiralty jurisdiction and gave them the right to bring a civil action under the Warsaw Convention. The court held that the new

allegation did not distinguish this complaint from its predecessor, and therefore this complaint was also dismissed. The fulfillment of the jurisdictional requirements of the Federal Death on the High Seas Act is not to be governed by a determination of such an elusive fact as whether a person died above, on, or in the sea.

CONDEMNATION — LAND LYING CONTIGUOUS TO, BUT OUTSIDE CONDEMNED AREA — DENIAL OF PETITION TO INTERVENE

Goodyear Farms v. United States

5 CCH Aviation L. Rep. 17,228 (9th Cir. Dec. 3, 1956).

Owners of land lying contiguous to an Air Force base had petitioned to intervene in a condemnation proceedings involving other land. These owners asserted that the take-offs and landings over their land would constitute an appropriation, for which they were entitled to compensation. While approving of the "before and after" test for measuring compensation, and holding that an owner, if he held land both within and without the condemned area, would be entitled to compensation for damages suffered by the whole tract, the United States Court of Appeals for the Ninth Circuit upheld the trial court's denial of certain motions for intervention. It was the court's opinion that the rights of persons owning land lying completely outside the condemned area could not be adjudicated in the condemnation proceedings. Furthermore, even as to those persons owning land partially within the condemned area, the court held that the petition for intervention was properly denied. These persons were already defendants in the condemnation suit and could appeal from a final judgment if they had not been awarded compensation for all of their rights taken or damaged. In addition, the court upheld the denial of a petition by easement holders for intervention. Although these petitions presented a justiciable issue, the easement holders were defendants in the condemnation proceedings and all the rights destroyed by the condemnation must be compensated in that proceeding.

The court also held that an order denying a motion of certain easement holders to amend their answers was not appealable. The judgments each contained a reservation for future consideration of matters relating to the petitions for intervention and were, therefore, not final orders. Although these judgments were based upon compensation for the fee simple title, in order to meet the requirements of the fifth amendment, any final order would have to award compensation for all property rights taken or destroyed. Hence, in order to be final as to the easement holder, these judgments would have to either grant or deny compensation for the claimed easements.

INTERSTATE COMMERCE — COMPANIES SERVICING AIRLINES — APPLICABILITY OF FAIR LABOR STANDARDS ACT TO EMPLOYEES THEREOF

Mateo v. Auto Rental Co.

5 CCH Aviation L. Rep. 17,240 (9th Cir. Jan. 23, 1957).

Mitchell v. Airline Foods, Inc.

5 CCH Aviation L. Rep. 17,244 (E.D. La. Jan. 9, 1957).

In the *Auto Rental Co.* case, the drivers of an airport limousine service had sued their employer for overtime compensation under the Fair Labor Standards Act. The limousine service was engaged principally in transporting airline and steamship passengers to and from the Honolulu International Airport and the Port of Honolulu and the downtown and Waikiki districts. However, the limousines were also used occasionally for sightseeing tours. The only contracts between the airlines and the limousine service

involving passengers, provided transportation of deplaning passengers who had not made prior arrangements. The trial court had held that the drivers were not employees "engaged in interstate commerce" and, therefore, denied recovery. In affirming this result, The United States Court of Appeals for the Ninth Circuit rejected the tests "affecting interstate commerce" and "production of goods for interstate commerce" and stated that the test for determining what industries came within the purview of the Fair Labor Standards Act was whether the particular industry was "engaged in interstate commerce." Basing its decision on the lack of comprehensive contractual agreements between the airlines and the limousine service, the fact that the limousine service was in stiff competition with other airport systems and taxicab companies, the fact that the limousines were not used exclusively for transporting interstate passengers, and the lack of evidence that the airlines exercised any control over the schedules, fares, and policies of the limousine service, the court held that the defendant was not an integral step in interstate commerce. As an additional basis for holding that the defendant was not engaged in interstate commerce, the court said that the stream of commerce ended upon a passenger's arrival at International Airport, and the transportation rendered by the limousine service was of a purely local nature. Since the defendant was not engaged in interstate commerce, its drivers were not covered by the Fair Labor Standards Act.

In the *Airline Foods, Inc.* case, the employees of a drive-in restaurant and catering service sued in the United States District Court for the Eastern District of Louisiana for a temporary injunction restraining their employer from violating the minimum wage, overtime pay, and record-keeping provisions of the Fair Labor Standards Act. Approximately one-half of the defendant's gross revenue was derived from its preparing meals for airlines to be served in flight. The court held that the preparation of meals for the airlines constituted "production of goods for interstate commerce," and that the employees carrying on such activities were covered by the Fair Labor Standards Act. Therefore, since the defendant had violated the provisions of the act, its employers were entitled to the preliminary injunction.

LANDINGS AND TAKE-OFFS — FEDERAL JURISDICTION OVER AIRCRAFT FLIGHTS — CONFLICTING MUNICIPAL ORDINANCE UNCONSTITUTIONAL

Allegheny Airlines, Inc. v. Village of Cedarhurst

238 F.2d 812 (2d Cir. Dec. 13, 1956).

The defendant village, which is situated at its nearest point about 4,000 feet from New York City's Idlewild Airport, had a municipal ordinance prohibiting flights over it at altitudes of less than 1,000 feet. The plaintiff airlines had sued for a permanent injunction restraining the enforcement of this ordinance, and an injunction was issued by the trial court. The basis of the trial court's decision was that the commerce clause of the United States Constitution granted to Congress the power to regulate the flight of aircraft in interstate and foreign commerce, that this power had been exercised by the Air Commerce Act of 1926, the Civil Aeronautics Act of 1938, and regulations of the Civil Aeronautics Board and the Administrator of Civil Aeronautics, and that the federal government had thereby preempted the field of air traffic regulation. Since the ordinance in question conflicted with these federal statutes and regulations, the trial court held it to be invalid. On appeal to the United States Court of Appeals for the Second Circuit, the defendant conceded that the federal government had preempted the field with respect to flights at altitudes in excess of 1,000 feet, but contended that Congress had not preempted the airspace under 1,000 feet. The Second Circuit, in rejecting this contention, held that Congress

had preempted the field with respect to flights at any altitude when it granted "freedom of transit in air commerce through the navigable airspace of United States." Further evidence, the court said, that the federal government had preempted the field below as well as above 1,000 feet was the delegation to Board of power to make rules concerning safe altitudes of flight at any elevation.

The court also rejected the defendant's further contention that the Board's and Administrator's regulations with respect to landings and take-offs constituted a taking without compensation. There were not sufficient flights over the village at any altitude to constitute a "taking." Furthermore, the court answered the attack that these regulations were the product of an invalid delegation of legislative power, by saying that it is not necessary that Congress provide a standard that can be applied with mathematical certainty. Decisions with respect to safe altitudes for any specific set of circumstances can only be made by some specially equipped administrative agency which can act *ad hoc* to carry out the congressional policy declared by statute. Therefore, for these purposes, the terms "safe altitudes" and "safety" provided sufficiently definitive standards.

AIRPLANE CRASH — VIOLATION OF FEDERAL AIR TRAFFIC RULES EVIDENCE OF NEGLIGENCE — PILOT'S EVASIVE ACTION NOT CONTRIBUTORY NEGLIGENCE

Hough v. Rapidair, Inc.

5 CCH Aviation L. Rep. 17,204 (Mo. Jan. 14, 1957).

The plaintiff was attempting to land his plane pursuant to instructions transmitted to him from the control tower. When he was about two hundred feet above the ground, he observed another plane proceeding on a collision course at right angles to his landing approach. When the plaintiff attempted to avoid a collision, his plane stalled and crashed, and the plaintiff was injured. The jury, in a personal injury and property damage suit brought by the plaintiff, found for the defendant. The trial court, however, sustained the plaintiff's motion for a new trial, and the defendant appealed the new trial order to the Missouri Supreme Court. Under the federal Air Traffic Rules, the plaintiff's plane, being on the right of the defendant's plane and also being on final approach to land, had the right of way over other aircraft in flight, and the defendant's plane should have given way to it. The Missouri Supreme Court, although indicating that violations of federal air regulations do not constitute negligence as a matter of law, held that such violations are evidence of negligence. The violations in this case, in connection with the other evidence, was sufficient to show that the defendant's aircraft had been negligently operated. In rejecting the defendant's contention that the plaintiff had been contributorily negligent, the court held that, by virtue of the transmitted instructions, the plaintiff had a right to assume that pilots of other aircraft would recognize that his plane had the right of way, especially planes approaching from his left. Also, the court refused to rule that the evasive action taken by the plaintiff, when confronted with an imminent collision, constituted contributory negligence as a matter of law, even though another course of action would have been safer. Furthermore, the court held, neither was there any other evidence indicating that the plaintiff had been contributorily negligent. Therefore, the trial court's instruction on the issue of contributory negligence, submitted in the disjunctive or alternative, was error and the new trial was properly granted.

BOOK REVIEW

THE ECONOMICS OF EUROPEAN AIR TRANSPORT. By Stephen Wheatcroft. 1956. Harvard University Press, Cambridge, Mass. PP. xxii, 358. $6.00.

Air transport in Europe is not as developed as it could be, given present population and standard of living. According to a recent study by the Air Research Bureau, the number of passenger miles per inhabitant and per $1,000 of national income is much less in Europe than in all other parts of the world, except India.[1]

Only very recently has attention been given to European air transport. Because of the political divisions of the continent, air services have developed independently to and from each European country. Every airline in Europe has given its attention to inter-continental operations and to spreading its business throughout the world for reasons of national prestige. The airlines have considered their European services as feeders of their long-haul, inter-continental routes, and, in the hard competition of the world air market, the cooperation between European airlines to serve the local intra-European market has never been considered. This lack of interest has been so great that complete and exact data on air transport operations and traffic flows in Europe does not exist. However, in 1954, a European Civil Aviation Conference met in Strasbourg, and the Air Research Bureau was created as a permanent organism working on the question of European air transport.

In this rather recent field of study, Wheatcroft's book should be useful to any person interested in the future of European air transport, and of great help to the managements of the different airlines in Europe, since it proposes solutions to present problems. These solutions are applicable immediately in most cases, or they can become the basis of discussions and action at the European Civil Aviation Conference.

The political divisions of Europe and the lack of international organization are not the only reasons for the difficulties of air transport in Europe. Other reasons are to be found in the permanent and structural features of the European market, and, sometimes, in the policies of the different managements of the airlines.

Of the permanent features, the author emphasizes Europe's small area, especially since the partition due to the Iron Curtain; and, "on this small area, less than half of the United States, there are more than twice as many miles of air routes as there are in the United States." (Page 5.)

Traffic is not evenly distributed on this overexpanded network. There are a small number of very high density air routes, and many sectors of very low traffic density. Another characteristic of this traffic is its short haul nature. "More than 60 per cent of the seats are operated on sectors of less than 300 miles, and more than 60 per cent of the seat miles are provided on sectors less than 400 miles." (Page 3.) The nature of short haul traffic is such that air transport is at a disadvantage compared with surface transport, both from the point of view of operating costs and from the point of view of revenues.

However, Wheatcroft tends to minimize the importance of this unchangeable factor of European air transport. He recognizes the difficulties of short-haul transport, and its special character, but his argument is that these difficulties arise, not from the inherent nature of this sort of operations, but from "an inadequate exploitation and development of the potential advan-

[1] *Intra European Air Transport*, Air Research Bureau Report (Brussels: November, 1953), p. 10.

tages of short-haul traffic." In other words, short-haul traffic has not been studied enough, and its difficulties in Europe have been overrated. Wheatcroft develops the idea that there is a high potential for short-haul traffic, and the solution to the problem lies in the development of a higher intensity of operations on short sectors.

A study of the relationship between size and efficiency of the airlines in the United States and in Europe leads the author to conclude that European airlines carry a sufficient volume of traffic to be able to achieve all the economies of scale in the industry. There are in Europe some very small airlines which, altogether, carry only 5 per cent of the regional traffic. They have an opportunity to gain the advantages of large scale operation by subcontracting in some particular fields, and they have usually done so.

Though the main European airlines do not seem to be at a disadvantage in terms of the size of their operations, the level of operating costs in Europe in 1952 was as much as 62 per cent higher than those for domestic operations in the United States. (For this comparison, only medium-size airlines, comparable to European ones, were taken into consideration.) From the examination of each item of operating costs, the author concludes that the means of reducing operating costs lies in the development of existing routes, i.e. to avoid further extension of the network and to develop more service where the potential demand justifies it.

The need for more intensive operations explains the general direction of the policies of competition and regulation that the author recommends in the second and third parts of his book. The necessity of keeping a certain amount of competition is emphasized. However, in Europe, it has sometimes been suggested that competition may be harmful on routes of very low traffic density, and, in such cases, pooling arrangements may be in the public interest. Competition is necessary and helps to provide the public with the best and cheapest service; however, some regulation is necessary too, since the more airlines there are on any route to share the traffic, the smaller will be the effective traffic flow for each of them. Among more than two competitors, competition may become harmful, and the benefits of competition are achieved as soon as there are two airlines on a route where demand permits adequate load factors. A defect of the European route network is the existence of too many sectors on which there are too many airlines operating in parallel.

The requirements for progress that the author suggests in the last part of the book include an economic framework indicating the lines along which reforms should be made in order to insure a better economic organization. He then gives the plan of the European organization which could be created to deal with the specific problems of European air transport. To achieve a higher intensity of operations, there should be a diminution of restrictive practices which have been adopted in air transport agreements, and this must be accompanied by coordinated regional planning of the air route system. The author suggests various actions which should be taken:

1. Traffic flows should be consolidated along major trunk routes by pruning the route system of those sectors which are not justified by their traffic potential. This would intensify the utilization of the whole system, since higher traffic flows on these major routes would call for larger planes, higher frequencies and higher load factors, bringing a noticeable reduction of unit operating costs, accompanied by a larger utilization of the stations.
2. General principles of the Bermuda agreements should be accepted as a basis of European air transport, with only controls on entry and tariffs, subject to the approval of the various governments, and a control of capacity to be exercised only by the ex-post-facto review procedure of the Bermuda agreement.

3. In order that governments may be fully informed and able to give accurate opinions on tariffs, detailed financial and statistical data about European operations should be collected.
4. Large cost reductions are possible by various measures of joint enterprise among the airlines, and there is a very large field in which cooperation can bring great benefit to the industry without in any way affecting the basic competitive relationship. A system of investment planning could be arranged in which all the airlines would participate to draw up future plans, so that future capacity could be generally matched with the agreed estimate of future traffic. Cooperation in traffic handling, by the organization of joint traffic handling agencies, would permit reduction of some station costs. Each major station or group of stations should be organized on a local basis with an independent manager in charge. There already exist some forms of cooperation, i.e., the Committee of purchasers of Aviation Materials. There are numerous opportunities for further cooperation in air crew training, purchasing of fuel and oil, interchange of aeroplanes and operations of through services. This last form of cooperation is often very favorably viewed, since it would be likely to increase the utilization of planes, which, because of the "spoke pattern" of the European networks, is much lower in Europe than in the United States.
5. Wheatcroft's final recommendation is for a regional organization of European air transport which could be worked out without political integration. This organism would depend on the European Civil Aviation Conference, with a multilateral air agreement. An Air Transport Commission would take care of the different fields of cooperation; this regional organization would be flexible and have complementary relationships with International Civil Aviation Organization and the different concerned governments. A super-national authority would be more efficient, but the organization Wheatcroft proposes could work with the sympathetic agreement of the governments, whose primary interest is to develop a sound system of air transport in Europe.

Throughout the book, a case is made for larger aircraft. This argument seems to be self-contradictory, since the load factors achieved in Europe are somewhat inferior to the ones in the United States. If the load factor is insufficient in a small plane, it will not be any better on a larger plane. The author notes that until now it has been the habit for all airlines to use large planes on long hauls and small planes on short hauls. Actually the main interest has focused for a long time on long-haul planes for numerous reasons, among which are the emphasis on the development of intercontinental routes and the potential air market on three routes. This is the field in which air transport is at its best, the bigger planes having been designed to have the lowest operating costs on long hauls.

On the other hand, from a general transportation standpoint the traffic flow will vary inversely with the length of the haul. (Pages 27-28.) Wheatcroft postulates that there is an optimum frequency to be achieved, beyond which it is more economical to use larger planes than to increase frequency further. The traffic potential on any sector can be evaluated from the population of the pair of cities and the distance between them. (Pages 27-28.) From the analysis made by Wheatcroft, it is indicated that "the traffic potential for the short-haul route of 250 miles ought to justify the use of an aeroplane twice as large in payload as the long-haul routes of over 2000 miles." (Page 29.) So he concludes that there is in Europe an urgent need for a large short-haul plane able to carry its maximum payload on a short range. "A large airplane can be designed for a short optimum range by

giving it a volumetric capacity great enough to carry the maximum load which it is capable of lifting for the short range and also by making its landing gear sufficiently strong to enable it to land safely at this weight." (Page 33.)

The requirement of a larger plane is certainly justified as long as the load factor stays the same, since more passengers can be carried and the unit operating costs are lower. The operation of larger planes in Europe may be open to some criticism. The Air Research Bureau study on the intra-European traffic between 1951 and 1954 indicates that the overall decrease of the load factor on European routes was due to the introduction of larger planes. Capacity was devoloping faster than the volume of traffic and the consequence was a decrease of the load factors of the new planes which had been introduced in those years. Wheatcroft quotes these findings of the Air Research Bureau. However, he adds, "the European route mileage has increased too rapidly. The overall traffic growth of the post war years has been very much greater than the increase in the average size of the airplanes used. Frequency of operations has suffered because the overall growth has been dissipated by an over-rapid development of the network of air services." (Page 57.)

However, Wheatcroft's response is not very plausible in this case, since the Air Research Bureau study shows that for ten high-density routes the load factor decreased on an average from 66 per cent to 60 per cent between 1951 and 1954; i.e., on ten sectors of more than 15 million passenger-miles in 1951.[2] It may be concluded that the average decrease of the load factor on these particular sectors cannot be the result of the over-extension of route mileage. This means simply that airline managements chose to operate larger planes rather than to increase frequencies. The same Air Research Bureau report indicates that average frequencies did not increase at all in the period considered. Wheatcroft's argument is that larger planes are more economical than smaller planes, but only once the desirable frequency is achieved. Under present conditions of air transport in Europe, it may seem a better policy to increase frequency, which is much lower than in the United States. Without losing sight of the necessary increase of the intensity of operations, flying larger planes is not the only solution.

In order to achieve all the favorable effects that a higher intensity of operations might bring, the traffic volume must increase greatly to fill larger planes. There is certainly a greater demand for travel between two cities 400 miles apart than between two cities 2000 miles apart. But on short distances, the saving of time achieved by air transport is not as important as on long distances, and, in order to compete with surface transport, air transport must offer fares which are not prohibitive. If the fares are too high, the public prefers to waste a little more time traveling, and to spend less money; this is true especially in Europe where the average income is much lower than in the United States. Under present conditions, larger planes cannot lower unit operating costs as much as would be necessary to offer fares competitive with surface transport on short distances. European airlines have been using large planes in recent years, such as the DC-6 and DC-6B, which have been designed for long-haul operations. All are fast, modern pressurized airplanes, with great passenger appeal. But these new planes are expensive, and they bear the burden of high depreciation costs. Wheatcroft stresses the need for a new, larger plane, especially designed for short hauls. Much as it is desired by all the short-haul airlines in the world, such a plane does not exist. So, at present, it is more feasible to increase frequencies than to increase the size of the plane. A small plane like the DC-3, designed for short hauls, could fly at higher frequency and

[2] *Intra European Air Passenger Traffic*, Air Research Bureau Report (1952-1954), p. 25.

with lower costs on short-hauls than a large plane designed for long hauls. Moreover, older planes like DC-3s do not have a depreciation rate comparable to newer and more expensive planes.

Wheatcroft sees the reduction of the level of operating costs as the only way to lower fares. The author makes a very complete description and study of the various items of costs which can be reduced in the years to come, comparing these costs to the American level. After efforts have been made to reduce costs, lowering of fares could result — a posteriori — from this policy. But, instead of considering the reduction of fares as a result, it could be used as a means to reduce costs, with the higher intensity of operations lower fares can bring. Under present conditions, "the dilemma of passenger fares in Europe is that they are still barely at a sufficiently low level to compete effectively with surface transport in the second class market, and yet with the standard of service which the airlines evidently consider essential to compete in this market, even the present level of fares is barely adequate for the economic self-sufficiency of local European services." (Page 170.) The author takes for granted that the airlines have to keep a high standard of service to compete with the second class market of the railways. But a new market can be created with a lower standard of service and a lower fare; this market would not compete with a market of high standard of service and higher fares. This is an entirely new field in which to develop air transport. Wheatcroft evokes this alternative as a possible future development. Some experiments were made in the United Kingdom and British overseas possessions and called "Colonial coach class." But the author does not investigate the possibility of introducing it in Europe. However, the general level of income being poor in Europe, it would seem more profitable to insist on the low fare aspect than on a high standard of service if more traffic is to develop. Wheatcroft recognizes that considerably lower fares could attract more traffic, but tourist fares have been introduced too recently to afford any basis for positive conclusion. The demand did not respond immediately on most of the sectors, but "it is entirely probable that the demand curve has an L shaped kink which is caused by the relationship between the air and second class fares, and if the air fare had been reduced considerably more, the demand would suddenly have become a good deal more elastic." (Page 119.)

An experiment was made by BEA between London and Glasgow in 1952; the fare went down 33 per cent during the winter, and the number of passengers went up 153 per cent. But the author recalls that it was an exceptional situation, the marginal costs there were low since the planes had to fly anyway to go to their maintenance base. "The difficulty that the airlines may face on other routes in Europe is that the fare level to which they must reduce in order to meet an elastic demand situation is below their present variable operating costs, and these set a lower limit to the reduction economically justified." (Page 119.) It may not be a sound policy to reject the idea of operating cheap, unpressurized planes like the DC-3 or the Viking, on the grounds that they would be in an unfavorable competitive position in comparison with modern and pressurized aircraft. In conclusion, larger planes cannot maintain adequate load factor at the present fares, and the operating costs are high. So the relation between revenues and costs is unfavorable and the airlines do not make money. Smaller, cheaper, unpressurized planes at higher frequencies could be operated at lower fares and attract more traffic. There is a great demand on some high density routes for a low fare even with a low standard of service. The competitive position of the planes in relation to surface transport is achieved by their greater speed, an advantage which can be felt beyond 300 miles. Wheatcroft proposes such a policy. "International Air Transport Association might be urged to devise a system of agreeing fares in which the airlines are left a

margin in the standards of service which they offer, but in which the variations in the standard of service are matched to differentials in the level of the fares which must be charged. This would give greater freedom to airline managements to decide the standard of service that they wished to provide and an even greater merit in encouraging a system which might offer the traveling public a greater choice in the matter of fares and comfort." (Page 267.)

The author devotes a whole chapter to the important problem of seasonal variations in Europe. The relationship between the lowest and the highest month is 1:2.5 in Europe, while in the United States, it is 1:1.4. These large seasonal variations seem to be a particular feature of European air transport, since in the case of BOAC whose network is not European, the relationship between the lowest and the highest month is comparable to the U. S. airlines.

Several policies are proposed, among which are the introduction of an aircraft adjustable to carry either passenger or cargo, a more flexible organization of the airline personnel and the possibility of exchanging equipment and personnel between airlines. The author makes a very strong point of discrimination which can be justified when it is based on cost factors. Since the marginal cost of running low period traffic is lower than the marginal operating cost of peak traffic, there is a justification for lower fares in the low period. There could be possible experiments of differential fares in the spring and autumn periods, when the elasticity of demand is likely to be more sympathetic to promotional fare reductions than in the winter. It appears to be an excellent proposal to try to spread the peak period over six months instead of the present three. In an air market subject to wide seasonal variations, smaller planes offer more flexibility permitting an increase in frequency and utilization of the planes at peak periods and a decrease in frequencies in the lowest month. Wheatcroft recognizes that if larger planes are to be used, it will be necessary to improve the handling of seasonal variations.

In the different fields of airline cooperation the author recommends investment planning among the different airlines in Europe. Such an agreement would involve a great deal of cooperation which might make competition disappear, if it succeeded too well. The decisions concerning the number and composition of fleets are a fundamental responsibility of the managements—the essential aspect of the "entrepreneurial function." It may be a step too far to regulate this activity, since even in the United States the Civil Aeronautics Board does not intervene in this field. But Wheatcroft supports it by saying that it will permit a diminution of other restrictions which are currently imposed upon European air transport. The proposal is to regulate competition at the point of investment programs rather than at the point of frequencies, standards of service and fares. Such investment planning would have a further advantage in the cost reductions that it would permit in maintenance, setting up joint technical facilities and enabling the operation of through services by means of equipment exchanges. The difficult point is to know how this could be worked out in an acceptable manner. Wheatcroft stresses that it will be of principal benefit to the small airlines, and they are the ones which restrict competition in other fields. If there were such investment planning, small airlines would be led to reduce the restrictions which impede air traffic on many sectors. This is certainly a very strong point, but it may be asked whether it would be very hard to make governments and airlines agree on this general planning. The solution sounds efficient, but it involves many political problems, and the probable delays in organizing it may be discouraging when one considers the time it takes to achieve European cooperation in other fields.

FRANCOISE PARDOS

BIBLIOGRAPHY

CURRENT LITERATURE ON AVIATION

BOOKS AND PAMPHLETS

AEROPLANE DIRECTORY OF BRITISH AVIATION, 1956: INCORPORATING WHO'S WHO IN BRITISH AVIATION. London, Temple Press, Ltd., 1956. 586p. 21 shillings.

THE AIRCRAFT YEAR BOOK 1956. Official Publication of the Aircraft Industries Association of America, Inc. 38th annual ed. Washington, Lincoln Press, Inc., 1957. 484p. $6.00.

Denmark. Ministry for Foreign Affairs. OPENING TOMORROW'S AIRWAYS: DANISH AVIATION FROM ELLEHAMER TO SAS. New York, Danish Information Office, 1956. 44p.
Special edition of *Danish Foreign Office Journal.*

LE GUIDE DU FRET AERIEN. Edition 1956. Paris, Editions Bereny et Cie., 1956. 199p. 800 francs.

Hamilton, Sam R. CIVIL AIR REGULATIONS IN PLAIN ENGLISH FOR ALL PILOTS. Minneapolis, T. S. Denison & Co., 1956. 95p. $3.00.

INDIAN SKYWAYS DIRECTORY OF ASIA 1956. R. Vaughan-Fowler, editor. Bombay, Aeronautical Publications of India, 1956. 227p. Rupees 10.

International Air Transport Association. Technical Secretariat. AIRPORT BUILDINGS AND APRONS: A REFERENCE DOCUMENT OF PRINCIPLES AND GUIDANCE MATERIALS FOR USE BY THOSE CONCERNED WITH THE PLANNING OF AIRPORT BUILDINGS AND APRONS. Montreal, The Association, 1956. 133p. $1.50.

JANE'S ALL THE WORLD'S AIRCRAFT 1956-57. Compiled and Edited by Leonard Bridgeman. New York, McGraw-Hill Book Company, 1956. 1 v. $25.00.

Lansing, John B. THE PLACE OF AIR TRAVEL IN THE TRAVEL MARKET. Selected Findings of the 1955 National Travel Market Survey. Reported to the Travel Research Association. Ann Arbor, Mich., Survey Research Center, Institute for Social Research, University of Michigan, 1956. 10p. $1.00.

LONDON AIRPORT, THE OFFICIAL STORY OF THE NEW WORLD AIR CENTRE. Prepared for the Ministry of Transport and Civil Aviation by the Central Office of Information. London, Her Majesty's Stationery Office, 1956. 61p.

Montany, Laurent. LE BOURGET, UNE PAGE D'HISTOIRE DE L'AVIATION MARCHANDE. Paris, Club du beau livre, 1956. 171p.

Mossman, Frank H. and Newton Martin. PRINCIPLES OF TRANSPORTATION. New York, The Ronald Press, 1957. 510p. $6.50.
Includes chapter on air transportation, p. 98-129.

ROLE OF AIR FREIGHT IN PHYSICAL DISTRIBUTION. Cambridge, Mass., Division of Research, Graduate School of Business Administration, Harvard University, 1956. 180p. $2.50.
Pt. 1. Characteristics of Air Freight and Its Market, by Howard T. Lewis and James W. Culliton. Pt. 2. Two Case Studies, by Jack D. Steele.

Stuart, John. AIR TRAVEL COMES OF AGE. New York, Public Affairs Committee, 1956. 28p. (*Its* Pamphlet No. 114A) $ .25.

Taylor, John R. W. PASSENGERS, PARCELS, AND PANTHERS; THE STORY OF OUR WORKING AIRCRAFT. New York, Roy Publishers, 1956. 159p. $3.00.

THIRD TURBINE-POWERED AIR TRANSPORTATION MEETING, SAN DIEGO, AUGUST, 1956. PROCEEDINGS. New York, Institute of the Aeronautical Sciences, 1956. 114p. $6.00.

Toland, John. SHIPS IN THE SKY; THE STORY OF THE GREAT DIRIGIBLES. New York, Henry Holt, 1957. 352p. $4.95.

TWA VACATION GUIDE AND WORLD ATLAS. Compiled for Transworld Airlines. Maplewood, N. J., C. S., Hammond Company, Inc., 1956. 384p. $4.95.

U. S. Air Coordinating Committee. 1956 ANNUAL REPORT TO THE PRESIDENT. Washington, U. S. Govt. Print. Off., 1957. 50p.

U. S. Bureau of Foreign and Domestic Commerce. CIVIL AVIATION IN BRAZIL, by N. W. Kendall. Washington, U. S. Govt. Print. Off., 1956. 14p. (*Its* World Trade Information Service, Pt. 4, 56-12) $ .20.

U. S. Civil Aeronautics Administration. 1960-1965-1970 CIVIL AVIATION AND FEDERAL AIRWAYS FORECASTS. Washington, U. S. Department of Commerce, 1956. 69p. $ .75.

U. S. Civil Aeronautics Administration. STATISTICAL HANDBOOK OF CIVIL AVIATION, 1956. Washington, U. S. Govt. Print. Off., 1956. 131p. $ .55.

U. S. Civil Aeronautics Board. COMPETITION AMONG DOMESTIC AIR CARRIERS, MARCH AND SEPTEMBER 1955. Washington, Research Department, Air Transport Association of America, 1956. 7 v. $90.00.

U. S. Civil Aeronautics Board. ORIGINATION-DESTINATION AIRLINE TRAFFIC SURVEY, MARCH 1-14, 1956. Washington, Airline Finance and Accounting Conference, Air Transport Association of America, 1957. 4 v. $25.00.

U. S. Congress. House. Committee on Government Operations. FEDERAL ROLE IN AVIATION. Hearings . . . June 25-July 20, 1956. Washington, U. S. Govt. Print. Off., 1957. 1418p.

U. S. Congress. House. Committee on Interstate and Foreign Commerce. AIRSPACE USE STUDY. Hearings . . . July 7-September 13, 1956. Washington, U. S. Govt. Print. Off., 1957. 343p.

U. S. Congress. House. Committee on the Judiciary. MONOPOLY PROBLEMS IN REGULATED INDUSTRIES. Hearings before Subcommittee No. 5. Part I. Airlines. Washington, U. S. Govt. Print. Off., 1957. 4 v.

Wisconsin, State Aeronautics Commission. A DECADE OF PROGRESS IN AVIATION IN WISCONSIN, 1946-1956: A PROGRESS REPORT PUBLISHED AND SUBMITTED TO WALTER J. KOHLER, GOVERNOR. Madison, The Commission, 1956. 47p.

Zinkahn, Willy *and* Hermann Leutz, eds. LUFTSCHUTZRECHT; KOMMENTAR. Berlin, Verlag C. H. Beck, 1956. 1 v. (loose-leaf)

PERIODICAL ARTICLES

Air Lines of the World. Aeroplane, Nov. 21, 1956; 91: 752-792.

Aircraft Lien Law and Procedure, by Ralph M. Mickelson. Illinois Bar Journal, Aug. 1956; 44: 863-868.

Airline Sponsorship of New Aircraft, by B. S. Shenstone. Shell Aviation News, Dec. 1956: 8-11.

Artificial Satellites—a Modest Proposal, by Myer S. McDougal. American Journal of International Law, Jan. 1957; 51: 74-77.

Business Flying to the Heart of Business. Canadian Aviation, Jan. 1957, 30: 37-45.

Developments in Irregular Air-Carrier Operations, by Lawrence Stentzel. Public Utilities Fortnightly, Dec. 6, 1956; 58: 899-906.

The Economics of Speed; Future Roles of Jet and Turboprop Transports, by Lord Douglas of Kirtleside. Modern Transport, Feb. 6, 1957; 76: 11, 14.

Freedom of the Air, by Frederick Tymms. Journal of the Aeronautical Society of India, Aug. 1956: 43-66.

The Helicopter as a Commercial Vehicle. Aeroplane, Dec. 14, 1956; 91: 881-886.

How Local Airlines Serve America. Esso Air World, Sept./Oct. 1956; 9: 30-39.

International Air Carriage—Limitation of Liability, by F. P. Neil. Modern Law Review, Sept. 1956; 19: 548-550.
Case note on Preston v. Hunting Air Transport.

International Carriage by Air, by Michael Aaronson. Law Journal, Nov. 30, 1956; 106: 755-758.

International Co-Operation in Civil Aviation. Associations International, Nov. 1956; 8: 689-720.

Logistic Planning of Airline Stores, by L. A. Ferney. Shell Aviation News, Nov. 1956: 7-8.

Main Street a Third of a Century Later, by Chapman R. Leinbach. Pegasus, Nov. 1956; 25: 1-7.
Discusses the development of local service airlines.

Man and Law in Space, by John C. Hogan. Case and Comment, Nov./Dec. 1956; 61: 12-20.

O. K. Helicopters, by Robert Frances. Pegasus, Jan. 1957; 26: 1-5.
An account of Okanagan Helicopters, Ltd., with headquarters at Vancouver International Airport.

Projecting the Law of the Sea into the Law of Space, by Rear Admiral Chester Ward. JAG Journal, Mar. 1957: 3-8.

Recent Developments in Air Law, by Bin Cheng. Current Legal Problems, 1956: 208-234.

Rights of Landowners with Respect to Transit Above Their Land, by Tom M. Alderson. Title News, Aug. 1956; 35: 5-8.

The Route of the Condors; the Story of Linea Aerea Nacional de Chile. Esso Air World, Nov./Dec. 1956; 9: 58-61.

Sabena's Role in the World Freight Market, by Richard Malkin. Air Transportation, Dec. 1956; 30: 14-18, 22-27.

Selection of Forum in Actions Involving Low-Flying Aircraft. Virginia Law Review, Dec. 1956; 42: 1115-1137.

Some Considerations on the Financing of the Air Transport Industry in the Jet Era, by Walter M. Sharp. Robert Morris Associates Bulletin, Oct. 1956; 39: 25-34.

Space Law—Basic Concepts, by Andrew E. Haley. Tennessee Law Review, Fall 1956; 24: 643-657.

Subsidy in Air Transport, by R. W. Spurgeon. Journal of the Institute of Transport, Nov. 1956; 27: 15-25.

Supersonic Air Transport, by J. M. Ramsden. Flight, Feb. 8, 1957; 71: 175-177.

Why the Businessman Must Study Air Freight's Economic Possibilities, by Stuart G. Tipton. Air Transportation, Jan. 1957; 30: 16-17, 20-24.

FOREIGN ARTICLES

L'Aviation civile en Yougoslavie (Aspect juridique et économique), par M. S. Smirnoff. Revue générale de l'air, No. 3, 1956; 19: 258-263.

La Chambre de compensation de l'association du transport aerien international (I. A. T. A.), par Jean Capdeville. Revue française de droit aérien, Oct./Dec. 1956; 10: 349-358.

La Codification des textes législatifs de l'Aviation civile et commerciale, par Louis Cartou. Revue française de droit aérien, July/Sept. 1956; 10: 245-256.

Compétence législative et administrative de l'Etat et des Institutions régionales dans l'emploi de l'Hélicoptère, par Michel de Juglart. Revue française de droit aérien, July/Sept. 1956; 10: 257-263.

Conflits entre la Convention de Varsovie et le Protocole de la Haye (La portée de l'article XVIII du Protocole), par R. H. Mankiewicz. Revue générale de l'air, No. 3, 1956; 19: 239-246.

Der Fluglärm in rechtlicher Sicht, von Alex Meyer. Zeitschrift für Luftrecht, No. 1, 1957; 6: 1-21.

Organisation und Entwicklung der internationalen Arbeit im Bereich des Luft-Privatrechts, von Edvin Alten. Zeitschrift für Luftrecht, No. 4, 1956; 5: 233-245.

Rechtsnormenkonflikte zwischen dem Warschauer Abkommen und dem Haager Protokoll, von R. H. Mankiewicz. Zeitschrift für Luftrecht, No. 4, 1956; 5: 246-256.

Renaissance de la Lufthansa, par G. D'Alauzier. Revue générale de l'air, No. 3, 1956; 19: 255-257.

Zur Frage eines internationalen Abkommens betr. den Zusammenstoss in der Luft, von H. Drion. Zeitschrift für Luftrecht, No. 1, 1957; 6: 22-31.